



# THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

**The Veterinary Transition Study -  
investigating the transition from veterinary  
student to practising veterinary surgeon:  
prospective cohort study**

**Rosie Allister**

PhD

The University of Edinburgh

2019

# Declaration

Name of candidate: Rosie Allister

UUN: s0564952

University email: [rosie.allister@ed.ac.uk](mailto:rosie.allister@ed.ac.uk)

Degree sought: PhD

No. of words in the main text of the thesis: 93,112

Title of thesis: The Veterinary Transition Study - investigating the transition from veterinary student to practising veterinary surgeon: prospective cohort study

I certify:

- a. that the thesis has been composed by me, and
- b. either that the work is my own, or, where I have been a member of a research group, that I have made a substantial contribution to the work, such contribution being clearly indicated, and
- c. that the work has not been submitted for any other degree or professional qualification except as specified.

Signature:

Rosie Allister

## **Abstract**

This is a study of mental health and transition. Despite concern about professional mental health, and a suicide rate among veterinary surgeons three to four times that of the general population, studies of veterinary professional mental health have largely been cross-sectional and descriptive; characterising a problem, and raising concern, but not exploring how professional mental health and work interrelate. This study is different. Following individuals over time, and exploring experiences in detail, it seeks to understand experiences of work and mental health at a significant point in veterinary working lives: the transition from university to professional practice.

There is a lack of evidence around the impacts of transition from study to professional practice. The Veterinary Transition Study starts to address this gap in understanding. It is a qualitative, prospective, cohort study: first meeting participants in their final year of veterinary study, it follows them through graduation, and into their second year of veterinary practice. Three interviews with each participant in total over the 3 years of the study facilitate an in depth understanding of the process of transition, and participants' experiences of mental health as they transition from student life to that of a professional veterinary surgeon.

Thirty six participants were recruited. All but one took part in at least one subsequent interview at 1-2 months or 19-27 months post-graduation.

The study explores mental health, experiences of support, and the development of professional identity. New findings included the importance of informal support for veterinary students and new graduates, which was as important as formal support, and a reluctance to access formal support for fear of career detriment. Those vets who experienced the greatest difficulty at transition were not those who had reported mental health problems as students. Participants' experiences of support at transition included being let down, and a mismatch between their experience and clinical responsibility given to them.

Through the analysis and trying to distinguish veterinary and non-veterinary factors affecting mental health, the importance of veterinary identity became more prominent. Most participants had been determined to become vets from an early age. However, participants did not identify as vets at the point of graduation but rather self-identified as vets only once they could operate as independent practitioners and not perceive that they needed support.

Separating personal and veterinary factors was in many cases not possible, so central was the identity of being a vet to participants' lives during transition to professional work, and all aspects of their lives were affected by it. Mental health both affected identity, and was affected by it, with personal identity and shared culture acting both for and against participants' mental health.

This study examines this relationship, and goes on to make suggestions from the findings for individual vets moving from university to professional work, for employers of new graduate vets, and for universities.

## Lay Summary

Many veterinary surgeons (vets) are affected by stress or mental health problems. More vets die by suicide than the average in the population. There are a lot of suggested reasons for this, but not much research. Most of the research that has been done looks at one time point only, and so cannot help us understand how mental health and stress change over time.

People have suggested that graduating from training to be a vet and the first few years of work might be an especially stressful time. This might be an important cause of mental health problems. Another important cause might be how people develop their own professional identity – what it means to them to be a vet. I investigated these causes by interviewing 36 vet students about their experiences of stress, mental health, support and identity. To understand changes with time, I did three rounds of interviews – in their final year of studying to be a vet, just after they qualified as a vet, and between 19 and 27 months after qualifying. Only one person did not take part in either the second or third rounds. Most people took part in all three interviews.

Almost all of the volunteers who took part in the study said they found studying and working stressful, and a lot of them spoke about their own mental health problems. Interestingly, the ones who had the most problems with stress or mental health as newly qualified vets were not the ones who had had mental health problems when they were students. A lot of people spoke about not getting enough support, especially when working as a vet. Many people felt let down by the lack of support for their job at work. Some felt awkward or ashamed to admit they needed support. More people used informal support for stress and mental health, such as friends, family or time with pets. Not so many people used formal support such as university or work schemes, or mental health services or counselling. This was partly because they did not think it would help, and partly because they were worried that asking for help might harm their careers.

Almost all of the volunteers said that they wanted to be vets from early childhood, and could not imagine doing anything else. They did not think that

qualifying as a vet was the point where they truly felt like a vet. This point came later, when they felt more confident working and doing operations without support.

These findings offer suggestions for how to improve mental health and reduce stress for vets. For example, it is important for universities and workplaces to make sure support is easy to access and kept private, and to protect vets so asking for help does not unfairly affect their careers. It might also help if we could work out ways to help people in the vet profession feel a bit differently about being a vet – the study showed that some people feel being a vet means they cannot need help. Helping them to be able to ask for help, and for the right type of help to be there might help their stress and mental health

## **Acknowledgements**

Thank you to the study participants, whose generosity with their time, trust in me as a researcher, and enthusiasm for taking part in this study made conducting this research a privilege.

Thank you to my supervisors, Wendy Loretto and Richard Mellanby, as well as Steve Platt, without whose encouragement, belief and support this study would not have happened.

For Maisy, Dug, Brando, Brooke and James; thank you for making me smile.

For Lisa, Amy, Janice, Alex, Pam, Katie, Joel, Susan, Donald, Lorna, Rob, Lindsey, Jo, Debbie, Chris, Dave, Michael, Stevie, Lisa, and Susan; thank you for getting me through this in all of the ways that you did.



# Contents

<b>Chapter 1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	The start.....	1
1.2	The context .....	3
1.2.1	Veterinary mental health .....	3
1.2.2	Veterinary identity.....	4
1.2.3	Veterinary student training, expectations and transition .....	7
1.2.4	Parallel professions and transition.....	9
1.3	Veterinary surgeons, mental health and suicide .....	11
1.3.1	The veterinary profession and suicide.....	11
1.3.2	Mental Health, Wellbeing and Suicide.....	12
1.3.3	Occupation and Suicide .....	13
1.3.4	Student mental health and suicide .....	16
1.3.5	Mental health and stigma .....	17
1.4	Study aims .....	18
1.5	Outline of thesis .....	18
<b>Chapter 2</b>	<b>Literature Review .....</b>	<b>22</b>
2.1	Introduction .....	22
2.2	Method for literature review .....	23
2.3	Veterinary student mental health, wellbeing and suicide .....	24
2.4	Mental health and transition to veterinary work from university .....	28
2.5	Veterinary mental health .....	29
2.6	Occupational stress and burnout among veterinary students and early career veterinary surgeons .....	31
2.7	Veterinary suicide risk.....	34
2.7.1	Access to means .....	36
2.8	Professional isolation and reluctance to seek help for problems ....	38

2.9	New graduate vets' expectations and experiences of work and of support at work.....	39
2.10	Professional identity .....	41
2.11	Veterinary professional identity.....	42
2.12	Conclusion.....	45
<b>Chapter 3</b>	<b>Methodology.....</b>	<b>47</b>
3.1	Introduction .....	47
3.2	Research design.....	47
3.2.1	Background to research design.....	47
3.2.2	Study aims .....	48
3.2.3	Ethics and health and safety .....	48
3.2.4	Planning for recruitment and interviews .....	50
3.2.5	Health and safety .....	51
3.3	Further ethical considerations, positionality and my approach.....	51
3.3.1	Further ethical considerations .....	51
3.3.2	Interviewing in the veterinary epistemological community.....	54
3.3.3	Positionality in my project.....	56
3.3.4	Insiderness.....	57
3.3.5	Self-disclosure and presenting myself.....	57
3.3.6	Power relations.....	59
3.4	Recruitment and the sample .....	61
3.4.1	Recruitment.....	61
3.4.2	Conducting the interviews .....	63
3.4.3	The sample .....	63
3.4.4	Project set-up and access .....	64
3.4.5	Interview place .....	67
3.5	Data collection, interviews, field notes. ....	69
3.5.1	Data collection.....	69

3.5.2	The first interview .....	70
3.5.3	The second interview .....	72
3.5.4	The third interview .....	74
3.6	Talking about mental health.....	76
3.6.1	Talking about mental health .....	76
3.6.2	Language .....	77
3.6.3	Disclosure .....	79
3.6.4	Surveillance.....	79
3.6.5	Uncertainty .....	80
3.6.6	Stigma .....	81
3.7	Analysis .....	82
3.7.1	Approach to analysis .....	82
3.7.2	Transcription .....	83
3.7.3	Transition .....	83
3.7.4	Reflexivity and positionality .....	84
3.8	Summary .....	85
<b>Chapter 4 Results - Experiences and perceptions of mental health and wellbeing during the transition from study to employment.....</b>		<b>86</b>
4.1	Synopsis .....	86
4.2	Data analysis .....	86
4.3	Experiences of psychological distress .....	87
4.3.1	Mental ill health, psychological distress, suicidal thoughts and suicide attempts.....	87
4.3.2	Suicidal thoughts and behaviour .....	88
4.3.3	Stress .....	96
4.3.4	Affective disorders.....	106
4.3.5	Eating disorders .....	110
4.3.6	Attention deficit hyperactivity disorder .....	114

4.4	Interaction of mental health and physical health .....	114
4.5	What influenced participant mental health? .....	119
4.5.1	Overview of factors influencing participant mental health.....	120
4.5.2	Expectations:.....	125
4.5.2.1	Self-pressure .....	125
4.5.2.2	External pressure.....	128
4.5.2.3	Social pressures and expectations .....	130
4.5.3	Aspects of veterinary training and work.....	133
4.5.3.1	Exams.....	133
4.5.3.2	Volume of work.....	136
4.5.3.3	Veterinary work.....	139
4.5.4	Giving things up and obstacles to support.....	141
4.5.5	Culture and beliefs about veterinary mental health .....	142
4.5.6	Positive influences on mental health .....	145
4.5.6.1	Pets .....	146
4.6	Mental health in transitions .....	147
4.7	Mental health, influences and transitions .....	156
<b>Chapter 5 Results - veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment.....</b>		<b>158</b>
5.1	Synopsis .....	158
5.2	Support, transition and induction .....	158
5.3	Analysis .....	161
5.4	Expectations of veterinary study .....	162
5.4.1	Not knowing what to expect .....	162
5.4.2	Hands on.....	163
5.4.3	Not fitting in .....	165
5.4.4	Hard work.....	167

5.5	Experience of veterinary study.....	168
5.5.1	Stress .....	168
5.5.2	Social aspects of veterinary study .....	168
5.5.3	Experiences of study .....	170
5.5.4	Professionalism .....	172
5.6	Expectations of veterinary work .....	175
5.6.1	Excitement .....	175
5.6.2	Stress .....	176
5.6.3	Responsibility .....	177
5.6.4	Hopes for support.....	178
5.6.5	Long hours .....	178
5.6.6	Ethical dilemmas .....	179
5.7	Experiences of veterinary work.....	180
5.7.1	Shock .....	180
5.7.2	Support.....	181
5.7.3	Employment practices .....	182
5.7.4	Gender discrimination .....	184
5.7.5	Contributing.....	187
5.7.6	Impact on health.....	188
5.7.7	Client interactions.....	190
5.8	Support at University.....	191
5.8.1	Expectation of support.....	191
5.8.2	Support at university.....	191
5.8.2.1	Experience of support.....	191
5.8.2.2	Attitudes to support.....	197
5.8.2.3	Barriers and enablers .....	203
5.9	Support at work.....	207

5.9.1	Expectation of support.....	207
5.9.2	Support at work .....	209
5.9.2.1	What helps.....	209
5.9.2.2	What doesn't help .....	217
5.9.2.3	Let down .....	221
5.9.2.4	Responsibility-experience mismatch.....	224
5.10	Support during study, work and transitions.....	231
5.11	Support summary .....	232
<b>Chapter 6 Results - Professional identity in vet students and new graduate vets.....</b>		<b>234</b>
6.1	Synopsis .....	234
6.2	Identity, socialisation, and being a professional.....	234
6.3	Analysis .....	235
6.4	The process of becoming a vet.....	236
6.4.1	Early age .....	238
6.4.2	Level of commitment .....	240
6.4.3	Vet or nothing .....	243
6.5	Values.....	245
6.6	Identity in conflict with wellbeing .....	254
6.7	The process of formation of professional identity.....	257
6.8	Veterinary identity .....	262
6.9	Summary .....	263
<b>Chapter 7 Integrated analysis, discussion and conclusions.....</b>		<b>264</b>
7.1	Synopsis .....	264
7.2	Experiences and perceptions of mental health and wellbeing among veterinary students during the transition from study to employment.....	265
7.2.1	Perceptions of veterinary mental health and wellbeing .....	265
7.2.1.1	Stigma and reluctance to seek help.....	266
7.2.1.2	Stress as inevitable.....	266

7.2.1.3	Veterinary narratives around suicide .....	267
7.2.2	Experiences of mental health .....	269
7.2.3	Mental health in transitions.....	270
7.2.3.1	Transition from school through veterinary training at university .....	271
7.2.3.2	Transitions at graduation .....	272
7.2.3.3	Transition to being a “real vet” .....	273
7.2.3.4	Transition to veterinary work.....	273
7.2.4	Veterinary mental health and suicide .....	275
7.2.5	Stress .....	278
7.2.5.1	Stress at transition to vet school and during vet school ...	278
7.2.5.2	Stress at starting work. ....	278
7.2.6	Mental health influences.....	279
7.3	Veterinary students’ and new graduate vets' expectations and experiences of veterinary work and support in entering employment.....	280
7.3.1	Expectations.....	280
7.3.2	Moral distress .....	281
7.3.3	Experiences of work .....	285
7.3.4	Expectations of support.....	287
7.3.5	Experiences of support.....	288
7.3.6	Support and veterinary identity.....	292
7.4	The development of professional identity in veterinary students and new graduate vets as they move from study to employment, the third aim of this study .....	293
7.4.1	The development of veterinary identity.....	293
7.4.2	The veterinary identity .....	293
7.4.3	Veterinary identity and mental health and wellbeing .....	295

7.5	Strengths and Limitations .....	300
7.6	Questions Arising from this Study .....	302
7.7	Recommendations .....	306
7.7.1	Recommendations for Universities .....	307
7.7.2	Recommendations for Vets .....	309
7.7.3	Recommendations for Employers .....	310
7.7.4	Recommendations for Further Research .....	310
7.7.5	Recommendations for the wider veterinary profession, Professional Regulators and Professional Associations .....	312
7.8	Summary .....	313
7.9	In conclusion .....	313
<b>Chapter 8</b>	<b>References.....</b>	<b>315</b>
<b>Chapter 9</b>	<b>Appendices.....</b>	<b>332</b>
9.1	Appendix 1: Abbreviations .....	332
9.2	Appendix 2: The invitation to the lunchtime seminar .....	333
9.3	Appendix 3: The information sheet .....	334
9.4	Appendix 4: The consent form .....	339



## Figures and tables

Table 3-1 Demographics of the study sample.....	64
Table 4-1 Summary of themes and subthemes on mental health.....	86
Table 5-1 Summary of themes and subthemes on support .....	161
Table 6-6-1 Summary of themes and subthemes on identity .....	235

# Chapter 1 Introduction

## 1.1 The start

What does it mean to be a vet? To become a professional?

Transition from study to professional practice is a feature of professional training, development, and professional life. The Veterinary Transition Study follows its participants through this transition. Arising from a context of concern around veterinary mental health, during this study new concerns grew in the UK veterinary profession, and elsewhere, particularly around a shortage of experienced vets and attrition of new graduate veterinary surgeons from veterinary practice and the profession. The findings and analysis of this study speak in this context, with concern for new graduate health and a desire to understand how veterinary graduates experience the transition to professional work and life.

A number of different types of evidence point towards transition being an important area to understand, and suggest that it is a time of particular risk for young vets. A systematic review of studies on veterinary mental health has highlighted that psychological distress is most common among vets under 35 years old (Platt et al., 2012b). A qualitative study described how vets are most likely to first experience suicidal thoughts in their final year of vet school or their first few years in practice (Platt et al., 2012a). Most calls to a helpline providing support to vets in crisis in the UK are from recent graduates (Allister, 2011).

Concern around veterinary student and new graduate mental health has previously focussed either on prevalence studies and quantitative data, sometimes troubled by low response rates, or discussion and debate within the profession, often not led by young vets, about what 'needs to be done', to an extent echoing generational concerns in wider society.

Knowing that there were already cross-sectional studies raising concern around veterinary mental health, but that models of veterinary mental health

and discussion in the profession of factors contributing to this concern during transition were largely speculative, I decided to perform a cohort study to follow individuals over time. This offered a strong way to study transition, with the prospective design meaning that participants contributed to the study before moving from university to professional work, during transition, and after starting work, reflecting that transition is a process, not a discrete event.

I chose to perform qualitative analysis of interviews rather than the quantitative approach often used in studies of professional mental health to understand experiences in a level of depth that is not possible in quantitative work, and also to explore some of the assumptions made in debates around professional mental health.

Using a recent example, the current debate around mental health in the profession has looked at screening out individuals who may be 'unsuitable' by nature of a predisposition to stress or mental health problems. Leaving ethical concerns with such an approach for discussion later, a cohort study provides particular insight for assumptions that conversations about screening are making. Is it the same individuals who struggle in practice as who suffer ill health before vet school or at University? Are there protective factors for mental health in practice as well as potential predisposition? Could screening work, or do ethical concerns and evidence point in a different direction?

Using another current example, there is concern in the profession about attrition among new graduate vets, and difficulty recruiting vets with more than 5 years' experience, but no prospective study, or in-depth interview analysis have been completed seeking to understand individuals' experiences of transition, work, and factors that may influence decisions to leave veterinary employment.

Previous studies have largely focused on characterising the problem, describing high rates of suicide, and expressing concern at the prevalence of mental health problems and poor wellbeing, without exploring routes to help professionals who are experiencing mental health problems or poor wellbeing

at work. In light of this, as well as looking at individuals' experiences of mental health during transition, this study also looks at individuals' experiences of support, including obstacles that made accessing or utilising support more difficult. It also looks at attitudes to seeking help among vet students and graduates, as well as at experiences of study and work, allowing exploration of which workplace factors influence mental health and wellbeing.

Over the time of this study various large-scale initiatives to provide interventions for veterinary mental health and wellbeing have been launched, but without a research base on how vets use, or do not use, support and interventions available to them. The current literature also does not tell us what vets believe that they need, or what helps. This study explores these questions too.

When this study began there was only a small amount of research published work on veterinary professional identity. From my own experience as a veterinary professional and having supported veterinary professionals on a specialist helpline for a number of years, I was interested in the role of professional identity for vets. Do the shared norms and values of veterinary professionals shape the transition to practice, either by setting expectations and behaviour, or by impacting health and wellbeing more directly? This study explores whether veterinary identity may act to influence individual mental health and wellbeing.

From this starting point, it seemed that a qualitative prospective study may provide data relevant to the understanding of professional mental health, and could have some value for understanding how best to improve veterinary mental health and wellbeing.

## **1.2 The context**

### **1.2.1 Veterinary mental health**

The context for veterinary mental health and wellbeing in the UK is complex, with a striking dissonance between public concern and personal silence.

Veterinary mental health and wellbeing feature as a high profile concern, with mainstream media attention, research papers and journal editorials, mental health and wellbeing talks at most veterinary conferences, and businesses devoted to improving veterinary wellbeing. A number of universities include mental health and wellbeing on the compulsory curriculum, and large programmes such as the Mind Matters Initiative delivered by the Royal College of Veterinary Surgeons (RCVS) receive a generally sympathetic reception from the profession. Yet at the personal level, few vets speak publicly about lived experience of mental ill health or difficulties of wellbeing, and there is evidence of self and public stigma around mental health among vets and veterinary students (Kassem et al., 2019, Allister, 2011, BVA/AVS, 2008).

Studies of vet students have found an elevated prevalence of suicidal thoughts compared to the general population, with 39% of penultimate year vet students experiencing suicidal thoughts in their lifetime, and 13% in the previous year (Allister, 2011). Vets have a suicide rate three to four times that of the general population (Platt et al., 2010), and there is evidence that suggests that the time of transition to practice may be a period particular risk for the development of suicidal thoughts (Platt et al., 2012b),. This study did not set out to determine prevalence and did not ask every student if they had been suicidal, but where students alluded to it in conversation, experience of suicidal thoughts and behaviour was explored.

### **1.2.2 Veterinary identity**

Developing professional identity is a crucial part of veterinary training. Vets, like other professionals, are influenced by occupational culture. Academic knowledge alone, without the ability to fit in and work with the norms and values held by others in the profession, and observe expected standards of professional behaviour, would leave veterinary graduates ill-equipped for veterinary life (Allister, 2015, Allister, 2016). Yet although professional identity has received extensive attention in medical and other professions,

until recently it has been largely absent from discourse on the veterinary profession.

As with many professions, as vets we have a social contract with our clients and society. By the end of training, vets are expected to behave professionally and uphold a range of ethical principles (Monrouxe and Rees, 2012). In medicine, professional identity formation has been described as the transformative process from lay person to physician (Holden et al., 2012) and involves the development of core values, self-awareness and moral principles. Monrouxe (2010) suggests that the development of medical identity is as important as the acquisition of knowledge to medical training, stating that medical education is as much about learning to talk and act like a doctor as it is about learning the content of the medical curriculum. Weaver (2011) notes that the development of identity as a physician is gradual, a process that enables a person to commit to professional goals and values that matter to them as a person, and which also are acceptable to the profession.

A number of theoretical perspectives, including social identity theory and self-categorisation theory, have been applied to understand and explore professional identity, and debate continues about these. It is generally agreed that socialisation plays an important role in the development of professional identity (Hotho, 2008). This is reflected in the professional training requirements of veterinary students, where the value of extra mural studies (EMS) and exposure to veterinary clinical practice goes beyond acquisition of academic knowledge. The importance of the development of professional identity can also be seen in the way veterinary education increasingly prioritises the teaching of professionalism, with ethics, communication skills, and the introduction of guidelines on professional behaviour using a veterinary fitness to practice model. Hotho (2008) observes that professional identity is one of the multiple social identities an individual holds, but socialisation into the professional community provides a sense of stability, belonging, and values, and fulfils aspects of individuals' social identity needs.

Professional identity exists in, and needs to be able to adapt to, a professional world which is constantly changing. Previously taken for granted, notions of respect for, or superiority of, professions have changed over time (Barnett, 2008, Scanlon, 2011). Deprofessionalisation processes (Haug, 1973) - the loss by professional occupations of their unique qualities such as monopoly over knowledge, public trust, and autonomy - have been debated for some time. Some authors have suggested that professional decline has been overstated, and the rise in consumerism has been offset by increasing specialisation of professions, maintaining a knowledge gap between professionals and clients (Freidson, 1986). However others point to changes in technology and education, with the exclusivity of the professional knowledge base challenged by a better educated, more critical client base with different expectations, and increased access to previously exclusive specialist information (Scanlon, 2011). There are challenges too to notions of altruism in professional status, as the trend for accountability sees professions questioned and doubted, with lay people more likely to question myths of professional omnipotence (Scanlon, 2011). Changes in other professions are also affecting veterinary life. In the public sector, the rise of managerialism and the value placed on efficiency and performance targets creates an ethic of performance which can be at odds with the ethic of service traditionally seen in the professions (Barnett, 2008). Professionals, including vets, subject to organisational and wider pressures have to reconcile their own values with the expectations that are placed upon them.

Developing professional identity is a key part of becoming a professional and therefore veterinary training. A small amount of formal teaching relating to identity exists on veterinary undergraduate curricula in the UK, mostly framed as professionalism, or professional and clinical skills. This typically includes topics such as professional regulation, indemnity insurance, and support for individual wellbeing.

At some UK veterinary schools this is contained within a single week of teaching, and also includes topics such as links between animal neglect and domestic abuse, and practice finance. This formal professionalism teaching

is typically delivered in the penultimate year of veterinary study, by which time veterinary students have already seen practice with vets, and have been studying at vet school for up to four years. In a previous study with fourth year vet students, I found that by this time vet students already had a strong shared sense of values and beliefs around what was expected of them as vets (Allister, 2011).

Like other professionals, vets are not only influenced by formal teaching. Other influences which may be stronger than that of formal teaching include occupational culture, the hidden curriculum, and the values and norms developed through other life experiences. The qualitative nature of this study allowed me to explore some of these influences.

### **1.2.3 Veterinary student training, expectations and transition**

Veterinary professional training in the UK is intensive, taken as a five or six year undergraduate, or in some circumstances four year graduate, training programme.

Even before fully qualifying veterinary students are exposed to some of the same work-related stressors that may affect fully qualified vets. As students they are also under other academic-orientated pressures such as examinations and other features of student life such as debt.

Financial debt has been linked to suicide and the development of mental health problems. A systematic review of the link between personal financial debt and the development of mental ill health found some association (Fitch et al., 2011). Meltzer (2011) conducted interviews with a random probability sample comprising 7461 respondents for the third national survey of psychiatric morbidity of adults in England and found that those in debt were twice as likely to think about suicide after controlling for sociodemographic, economic, social and lifestyle factors. In a psychological autopsy study of doctors who died by suicide, 29% had significant financial problems in the year before they died (Hawton et al., 2004).



Veterinary medicine is a vocational course with a low rate of attrition during undergraduate training (Tomlin et al., 2009). The majority of new graduate veterinary surgeons go into work in clinical practice (Robinson and Hooker, 2006). Yet veterinary medicine is a diverse field of work: as well as the implied career choice to become a veterinary surgeon, further career choices are made by veterinary students and new graduate veterinary surgeons in selecting the area of veterinary work they will go into on graduation.

There have been initiatives to increase support available to veterinary students (Mellanby et al., 2011, Pickles et al., 2011). There is increasing evidence that it is veterinary surgeons under 35 years who may be most at risk of difficulties of wellbeing (Platt et al., 2012a), and that the time of transition to practice from training is the time when vets may be most likely to first experience suicidal thoughts (Platt et al., 2012a). However, despite concerns about the difficulties experienced by new graduate vets at transition, there is a lack of research about wellbeing in new graduate veterinary surgeons and little evidence is available about wellbeing at this specific career point. Potentially stressful aspects of transition include identity transformation, professional responsibility and employment issues. A number of contemporary labour market issues particularly impacting on new veterinary graduates may further heighten the stress of transition. It is also a time of large changes in workload, expectations, tasks, and responsibilities. New graduates often have to relocate geographically away from support networks developed at university, yet how these factors influence mental health and wellbeing, and how they interact, is not well understood.

The transition from veterinary student to veterinary surgeon has been described as a “make or break” period in veterinary careers (Gilling and Parkinson, 2009). Since 2007, with the introduction of the Postgraduate Development Phase (PDP) by RCVS there has been significant reform to post graduate veterinary training in the UK, yet concerns persist about poor wellbeing and the high suicide rate in the veterinary profession.

The RCVS PDP must be completed by all new UK veterinary graduates in the first few years of veterinary work. The development of the PDP was seen as an important progression for veterinary postgraduate training. Unlike medical graduates, veterinary graduates previously had no standardised postgraduate career structure. In parallel with PDP, there has also been an increased focus on graduate employability in recent years and “graduate attributes” have featured strongly on the veterinary education agenda (Heath and Mills, 2000, Doucet and Vrins, 2009, Laidlaw et al., 2009, Lane and Bogue, 2010, Schull et al., 2012, Rhind et al., 2011b, Heath, 1998a). The discussion around PDP has highlighted concern from veterinary employers that graduates lack key attributes. Inadequate development of attributes has been linked to high rates of new graduate attrition, distress, and clinical mistakes.

Consequences of student and new graduate psychological distress may include impaired academic performance (Dyrbye et al., 2005); although some evidence counters this: in a study of new graduate doctors, Van Hell and colleagues (2008) found that difficulty experienced during transition was not correlated with impaired clinical performance. Distress may also be related to clinical mistakes in new veterinary graduates. The relationship between clinical mistakes and psychological distress is complex. Psychological distress has the potential both to cause and be caused by mistakes. In new graduate doctors mistakes have been linked to substance abuse, impaired mental health and suicide (Dyrbye et al., 2005).

#### **1.2.4 Parallel professions and transition**

In parallel professions such as medicine, the transition from medical student to doctor is often experienced as difficult and stressful (Lempp et al., 2004, Brennan et al., 2010, Pitkala and Mantyranta, 2003, Luthy et al., 2004). The first year of work as a doctor has been described as a “survival exercise” (Bligh, 2002).

Bogg (2001) studied junior doctors in their first year of work and found that 25% were experiencing burnout. However, this study was relatively small (n experiencing burnout = 14). Occupational control was also found to be experienced as external; many individuals perceived events as occurring outside individual control.

A number of studies have suggested that junior doctors and their supervisors feel the undergraduate course does not adequately prepare them for starting work (Illing et al., 2013, Goodfellow and Claydon, 2001, Brennan et al., 2010, Morrow et al., 2012). A higher perception of preparedness has been linked to lower stress at transition (Cave et al., 2009).

New doctors' perceptions of their own preparedness for work may be influenced by their personal characteristics as well as by characteristics of their undergraduate training (Cave et al., 2009, McManus et al., 2004) with personality traits of doctors predicting their perceptions of their working environment and their job satisfaction. Wilkinson and Harris (2002) found junior doctors who lack flexibility, are shy or appear unmotivated, are at risk of not developing into their professional role in a health care team.

Some studies have investigated the effect of age or gender on difficulty at transition in new doctors. Buss and colleagues (1998) found that older students felt more prepared to discuss end of life issues with patients and suggested doctors who are older at graduation may feel more prepared for aspects of transition. Shacklady and colleagues (2009) describe how mature students transition better from preclinical to clinical learning during medical school. In apparent contrast, Cave and colleagues (2009) found that there was no association between gender or graduate entry and preparedness at transition to medical practice. They found that the largest contributors to preparedness were the relevance of the medical school teaching to real life as a doctor (including shadowing and problem-based learning courses), and the ease with which junior doctors felt they could get help at work. Early clinical experience was also linked to increased preparedness by Morrow (2012), Illing (2013), and Brennan (2010).

Further stressors among new graduate doctors are: high personal expectations, concern about their competency in emergencies, ignorance of routine hospital processes, clinical and administrative workloads, dealing with newly gained responsibility, managing uncertainty, working in multi-professional teams, experiencing the sudden death of patients, increased responsibilities, altered relationships with patients, and feeling unsupported (Prince et al., 2004, Brennan et al., 2010, Lempp et al., 2004, Teunissen and Westerman, 2011).

Equivalent data for the veterinary profession has not been published, however similarities between working lives and responsibilities of new graduate vets and doctors raises questions as to whether new graduate vets are being exposed to similar stressors as new graduate doctors.

## **1.3 Veterinary surgeons, mental health and suicide**

### **1.3.1 The veterinary profession and suicide**

Although this study looks at a wide range of experiences around mental health, it is important to situate it in the context of debates and discussion about suicide among veterinary surgeons. Concern around veterinary mental health is often expressed as alarm at veterinary suicide rates. The UK veterinary profession has a suicide rate historically among the highest of professional groups and three times that of the general population (Platt et al., 2010, Mellanby, 2005, Kelly and Bunting, 1998, Kinsella, 2006, Charlton, 1995, Meltzer et al., 2008, Stark et al., 2006). Recent studies of suicidal behaviour and mental health in vets have identified potential occupational stressors in veterinary working life, and aspects of being a veterinary surgeon which may contribute to risk (Platt et al., 2012b, Platt et al., 2012a, Bartram et al., 2009a).

Certain subgroups of veterinarians have been identified as being more likely to suffer difficulties of wellbeing. Female vets, younger vets and those working alone rather than with others are at increased risk of suicidal thoughts, mental health difficulties and stress. The time of transition to

veterinary practice has been observed as a time of particularly poor wellbeing in veterinary working life and vets who experienced suicidal thoughts and behaviour often first experienced it around the time of transition (Platt et al., 2012b, Platt et al., 2012a).

### **1.3.2 Mental Health, Wellbeing and Suicide**

The World Health Organisation estimates that one million people worldwide die by suicide each year, more deaths than are caused by murder and war combined, and the tenth leading cause of death worldwide (WHO, 2002). Non-fatal suicidal behaviour also carries a significant burden of morbidity; attempted suicide is estimated to be 20 times as common as completed suicide.

The relationship between mental health problems and suicide has been extensively described. Mental disorder has a strong association with suicide risk (Hawton and van Heeringen, 2009). In a systematic review of psychological autopsy studies, Cavanagh (2003) found mental disorder to be more strongly associated with suicide risk than any other antecedent.

Mental ill health has significant individual, social and economic costs. It is estimated that one in four adults in Britain experiences at least one diagnosable mental health problem in any one year, and one in six experiences this at any given time (ONS, 2013). Stress has consistently been one of the most commonly reported types of work-related illness cited in the national Office for National Statistics Labour Force Survey. The prevalence of stress in 2011/12 was 428,000 cases (40%) out of a total of 1,073,000 cases for all work-related illnesses in Great Britain and 10.4 million working were days lost to work related stress in 2011/12. On average, each person suffering from this condition took 24 days off work, one of the highest average days lost per case amongst the health complaints covered in the Labour Force Survey.

Concerns have been expressed at the incidence of suicide among young people in the general population (Gunnell et al., 2003, Hawton et al., 1999,

Williams, 1997). Suicide is the second leading cause of death among 15-29 year olds globally (WHO, 2019). Young people aged 16-24 are more likely to attempt suicide than those in older age groups (Meltzer, 2002).

### **1.3.3 Occupation and Suicide**

The link between suicide and occupation is not well understood (Stack, 2001). Suicide rates are generally highest among people who are unemployed and semi- and un-skilled manual workers, although the reasons for this association are complex. High rates are associated with mental illness, which is associated with both unemployment and suicide (Hawton and van Heeringen, 2009, Platt and Hawton, 2000), but certain professional groups also appear to be at increased risk of suicide.

Research on suicide and occupation has often suffered methodological limitations leading to inconsistent findings (Stack, 2000, Stack, 2001). Using multivariate analyses however, certain occupations have been identified as high risk in a number of countries, including doctors, dentists, nurses, pharmacists, vets and farmers (Gallagher et al., 2008, Charlton, 1995, Hawton et al., 2001, Hawton et al., 2011, Meltzer et al., 2008, Andersen et al., 2010, Hawton et al., 1998, Platt et al., 2010, Boxer et al., 1995, Agerbo et al., 2007, Stark et al., 2006).

Access to means of suicide is one of the most commonly proposed explanations for increased risk in occupations where suicide rates are elevated (Platt et al., 2010, Agerbo et al., 2007, Hawton et al., 2011, Hawton et al., 2000). Elevated suicide risk has been described in observational studies among doctors, dentists, nurses and farmers (Platt et al., 2010).

Access to, and knowledge of, medicinal drugs, is common to many medically related occupations and is often cited as a factor in their risk. Veterinarians have even greater access to euthanasia agents than these high-risk groups, as well as, in some areas of veterinary work, firearms. Some authors have also suggested that vets are less supervised in their use of medicines than other healthcare professionals (Bartram and Baldwin, 2010, Fishbain, 1986).

Studies with other occupational groups confirm that methods used for suicide are influenced by profession and access, with marked differences between the methods used by some professions and the general population.

Medicinal drug overdose is overrepresented in doctors compared to suicides from the general population (Hawton et al., 2000, Hawton et al., 2011) and firearm deaths are overrepresented in farmers (Agerbo et al., 2007, Hawton et al., 1998, Stark et al., 2006). Yet there are conflicting results on occupational suicide risk: other investigations have not found increased risk in all of these groups and in some cases the reverse has been indicated with professional groups described by some as high risk found to be at lower risk of suicide than the general population (Cohidon et al., 2010, Skegg et al., 2010, Hawton et al., 2011, Petersen and Burnett, 2008, Meltzer et al., 2008).

Roberts (2013) examined suicide rates by occupation in Britain and found that the highest risk occupations during the late 1970s and early 1980s, including veterinarians (ranked first), pharmacists (fourth), dentists (sixth), doctors (tenth) and farmers (thirteenth), were no longer at highest risk in analysis of 2001-2005 data, whereas manual occupations saw big increases in risk, suggesting possible change in occupational risk with time.

There may be a number of reasons for these conflicting results. A limitation to data on occupational suicide risk is that many studies rely on proportional mortality ratios (PMR) to express the risk of suicide. These should be interpreted with caution as PMRs are affected by the relative frequency of deaths due to other causes in the population. The PMR for suicide is calculated as the number of observed suicide deaths divided by the number of expected suicide deaths, expressed as a percentage. Therefore a high PMR may simply reflect a relative deficit of deaths from other causes (Platt and Hawton, 2000), and a high PMR in a population may not translate to a high standardised mortality ratio (SMR) (Meltzer et al., 2008). In the veterinary profession however, the relatively small size of the profession (18,891 UK practicing members registered with the RCVS March 2013 (RCVS, 2013b)) creates a denominator issue and limits the amount to which other statistical measures can be used to assess the mortality ratio.

Further limitations in data on occupational risk are caused by problems with data relating to occupation recorded at death, which may not reflect occupational census data (Meltzer et al., 2008), and also in the case of professional groups, may not reflect members of the profession who are currently not working or not registered due to ill health.

Another explanation for discrepant findings between studies on occupational risk may be change in occupational suicide risk over time. Recent evidence has started to point towards this, however this is difficult to assess as PMR and SMR are relative measures at a set time point and do not allow for analysis of trends over time. Additionally, because SMR relies on census data it can only be calculated in census years and may be subject to numerator/denominator bias, especially for women (Meltzer et al., 2008). An advantage of PMR is that unlike SMR, it is not subject to numerator/denominator bias because all data come from the same source (the death certificate).

Suicide is a complex problem which is never the consequence of one single factor (Hawton et al., 2009). Risk factors have been described as state dependent or trait dependent, proximal or distal. Various explanatory models of suicide risk have been proposed including the diathesis-stress model which takes into account an individual's vulnerability or predisposition and other stressors or life experience that may contribute to risk (Hawton, 2000, Hawton et al., 2009).

In the general population, high levels of perceived stress have been observed in people with early signs of suicidal thoughts (Vilhjalmsson et al., 1998). A substantial body of research suggests that an increasing proportion of the population suffers from high levels of stress at work (Loretto et al., 2005), and concern has been expressed over the negative impact of stress on the psychological wellbeing of individuals. Cooper and Marshall's (1976) model of work related stress describes five sources of stress at work: those intrinsic to the job, including factors such as poor physical working conditions, work overload or time pressures; role in the organisation, including role



ambiguity and role conflict; career development, including lack of job security and under/over promotion; relationships at work, including poor relationships with one's boss or colleagues; and organisational structure and climate, including little involvement in decision-making and office politics (Cooper and Marshall, 1976, Johnson et al., 2005).

Occupational issues including client dependence, social isolation and status integration have also been identified as potential contributors to suicide risk in other professions (Stack, 2001, Johnson et al., 2005). Aspects of the veterinary occupational role overlap with other occupations known to be at risk from stress related problems. For example, rural stress has been well described in the case of farmers, another occupational group where the suicide rate is elevated (Gregoire, 2002, Malmberg et al., 1997, Stark et al., 2006, VanHaaften et al., 2004, Hawton et al., 1998). Some veterinarians are part of the farming industry, may have similar long hours, rurality and be affected by financial pressures on the farming community.

When looking for explanations of difference in suicide rates in different population groups, the role of attitudes to suicide should be considered (Etzersdorfer et al., 1998). It has been suggested that attitudes towards suicide (the degree to which people see it as an acceptable option under some circumstances) may moderate the link between both hopelessness and depressive symptoms on the one hand and levels of suicidal ideation on the other (Gibb et al., 2006, Sawyer and Sobal, 1987). Attitudes can also influence help-seeking behaviour.

#### **1.3.4 Student mental health and suicide**

International studies on student suicide and mental health have raised concerns at increasing levels of mental ill health among students (Eisenberg et al., 2007). There is extensive literature on student suicide (Farrell et al., 2017, Collins and Paykel, 2000, Hamilton and Schweitzer, 2000, Sato et al., 2006, Schwartz, 2011, Silverman et al., 1997, Dhingra et al., 2019, Hawton et al., 2012 and others, Platt, 1987). In England and Wales The Office for

National Statistics estimates student suicide rates and in the 12 months ending July 2017 found a rate of 4.7 deaths per 100,000 for higher education students. Between 2013 and 2016 higher education students in England and Wales had a suicide rate significantly lower than people of similar ages in the general population (ONS, 2018).

### **1.3.5 Mental health and stigma**

Stigma against people with mental ill health can perpetuate self-stigmatisation, contribute to low self-esteem and contribute to negative outcomes (Mehta et al., 2009, Ritsher and Phelan, 2004). It has been suggested that sensitivity to stigma against mental health problems and concern about confidentiality are greater in small rural communities (particularly relevant to certain types of veterinary work); and that this has a negative impact on help-seeking behavior (Gregoire, 2001, Gregoire, 2002). There is evidence of stigma among veterinary students (Allister, 2011), but how this develops, is maintained, or interacts with veterinary professional identity is not well understood.

Stigma is considered an important barrier to accessing mental health services (Corrigan, 2004). Concerns about stigmatisation are one of the primary factors inhibiting mental health service utilisation and treatment adherence (Vogel et al., 2007). Two types of stigma have been described; public stigma and self-stigma. Public stigma, has been defined as the perception held by others that an individual is socially unacceptable. Self-stigma, is the perception held by the individual that he or she is socially unacceptable, which can lead to a reduction in self-esteem or self-worth if the person seeks psychological help (Vogel et al., 2007). Self-stigmatisation is a significant barrier to helping people with mental ill health (Vogel et al., 2013). Self-stigma is thought to occur when people experiencing a mental illness or seeking help self-label as someone who is socially unacceptable and in doing so internalize stereotypes, apply negative public attitudes to themselves, and suffer diminished self-esteem and self-efficacy (Vogel et al., 2007, Vogel et

al., 2013). Public stigma can lead to self-stigma, and where this is the case interventions could be developed to interrupt this process at the individual level and reduce or eliminate self-stigma despite perceptions of public stigma (Gulliver et al., 2012, Vogel et al., 2013, Corrigan et al., 2012, Larson and Corrigan, 2010).

## **1.4 Study aims**

I developed the aims for this study on the basis of the gaps in the literature already mentioned, and to try to inform future support and interventions to help veterinary students and graduates who are struggling with poor wellbeing or mental ill health. The aims were also designed to support a contribution to understanding of veterinary identity, what it is, and whether it matters in considering professional health.

The research aims of the Veterinary Transition Study are:

1. To provide insight into veterinary student and new graduate vets' perceptions and experiences of their mental health and well-being during the transition from study to employment.
2. To understand veterinary students and new graduate vets' expectations and experiences of veterinary work and support in entering employment.
3. To explore the development of professional identity in veterinary students and new graduate vets as they move from study to employment.

## **1.5 Outline of thesis**

In this chapter I have introduced some of the background to the Veterinary Transition Study and its aims. I described the context for the study and some of the background, debates and concern about veterinary mental health and

wellbeing. I discussed how these led to this study and the choice of method and approach. I then looked in more detail at the context for concern around veterinary mental health, considering veterinary and professional identity, veterinary student training, expectations and transition as well as considering the literature from parallel professions and the transition to professional practice. I also gave an overview of the literature on veterinary surgeons' mental health, and concerns around veterinary suicide rates. I then discussed mental health and suicide in the wider population, and the link between occupational factors and suicide risk. I talked about student mental health, suicide and mental health stigma. I then described the aims of the study and provided an overview of the thesis chapters.

In Chapter 2 I develop the areas introduced in Chapter 1 and review the literature in further areas relating to veterinary mental health, occupational stress, and identity. I also discuss the literature on veterinary suicide. I review the literature on the transition to veterinary work from university, highlighting areas which are under-researched. I also consider research on veterinary professional identity, and include a range of interpretations of identity in this to include the full extent of the literature on it, reflecting the small amount published on this.

In Chapter 3 I set out the methods for this study and reflexively consider my approach to the research. I talk about the aims of the study, ethical considerations, how I planned it, and how it changed. I consider my positionality in the project and how this may have influenced my research practice and the data. I talk about recruitment, conducting the interviews, and about my approach to the analysis. I also consider considerations that arose during interviews and analysis, what I learnt about talking about mental health, language, disclosure, surveillance, uncertainty, and stigma.

In Chapter 4 I examine the analysis relating to the first aim of this study, exploring experiences and perceptions of mental health and wellbeing among veterinary students during the transition from study to employment. I consider mental health at each stage of the study across three interviews: in the final

year of veterinary study, shortly after graduation, and 19-27 months after graduation. I explore how although experiences of mental health problems, stress, and distress were common among students, mental health did not deteriorate at the time of graduation. However, it did for some participants during their first two years in veterinary work. I also describe that it was not the same students who experienced the greatest difficulties with mental health at vet school as in early career veterinary work. Chapter 4 also develops themes around mental health including influences on participant mental health, transitions and mental health, and veterinary culture and beliefs about mental health, a theme that is expanded further in Chapter 7.

In Chapter 5 I examine participants' experiences around the second aim of this study. This was to understand veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment. This examines experiences of support in the context of social support theory and literature on work induction and university to work transition. Transition into work was characterised by a deficit of emotional and instrumental support for some participants, particularly support for clinical work. It expands themes generated around support and introduces a responsibility-experience mismatch, as well as gender discrimination and employment practices that impacted health. It develops themes around moral distress and how not being able to act in the way that they believed that they should affected participants. It also looks at influences that made transition more positive for some participants and themes around support at university and at work that were helpful.

Chapter 6 explores the development of professional identity in veterinary students and new graduate vets as they move from study to employment, the third aim of this study. It explores an identity that started very early, with influences in childhood, with strong motivations around animal care and welfare. It examines the process of development of veterinary professional identity, and the strong shared values and expected norms of behaviour. It looks at influences that shaped this identity, beyond those on the veterinary taught curriculum, and finds that EMS and experiences on clinical

placements have a vital though sometimes unintended role. It looks at how the point of feeling that they were a “real” vet was not at graduation or at starting work for participants but was later and was associated with autonomy, independence, and clinical competency. It begins to consider how these aspects of identity may act to undermine mental health and wellbeing.

Chapter 7, the final chapter, includes integrated analysis, discussion, conclusions, and implications for practice. It extends themes developed around mental health, support and identity to examine the ways in which veterinary identity may affect veterinary mental health and how and whether veterinary students and new graduate vets experience and access support. It explores how veterinary identity could act to inhibit access to support, and considers narratives about veterinary suicide in the context of the cultural scripts theory of suicide. It concludes by making recommendations for universities, vets, employers, the veterinary profession including regulators and for further research.

## Chapter 2 Literature Review

### 2.1 Introduction

This literature review sets out to overview current knowledge about veterinary mental health, veterinary professional identity, and support and experiences of work at transition to veterinary practice. It discusses some of the limitations of current research evidence in this area and highlights areas where understanding is limited. It demonstrates an overwhelmingly quantitative positivist approach to understanding veterinary mental health, identity and support at transition and highlights some of the drawbacks of the lack of sociological and qualitative enquiry in this area.

Section 2.1 introduces the chapter, Section 2.2 describes the method for the literature review, Section 2.3 reviews evidence on veterinary student mental health, and then Section 2.4 looks at mental health and wellbeing during the transition to practice. The next section expands the literature on veterinary mental health introduced in Chapter 1, then Section 2.6 reviews literature on workplace mental health phenomena including burnout and occupational stress. Veterinary suicide is considered in Section 2.7, again building on literature introduced in Chapter 1. Professional isolation and reluctance to seek help for problems is explored in Section 2.8 and new graduate vets' experiences and expectations of work in Section 2.9. Section 2.10 follows on from the professional identity literature introduced in Chapter 1 and explores literature about professional identity, before Section 2.11 reviews literature on veterinary professional identity, most of which is very recent in this new area for veterinary research. This section includes a range of interpretations of career identity including career identity, professional identity and professional communication identity. This is because in an area with limited literature I wanted to explore the full range of work that is occurring. Section 2.12 concludes the chapter and looks ahead to the methodology in Chapter 3.

## **2.2 Method for literature review**

The literature reviewed for this study was collected through an ongoing process throughout the duration of the study. Having completed an MSc in public health using a multiple methods approach to understanding veterinary student mental health (Allister, 2011) I already had hundreds of relevant references. During 2012-2014 I conducted searches of relevant databases for keywords. These databases included the Social Sciences Citation Index, Medline, PsychArticles, and PsychInfo. In subsequent years during the study as the University of Edinburgh produced a tool searching all of their library subscription content including databases, ejournals, journals, books, ebooks, and newspapers, I used this search tool, DiscoverEd, to conduct further keyword searches.

Keyword searches that I focussed on included: vet, veterinary, veterinarian, mental health, suicide, self-harm, self-injury, identity, professional identity, transition, occupation, support, social support, and stress, however searches widened with my reading. I hand-searched reference lists of relevant papers, and conducted focussed searches as themes were generated, for example around gender discrimination. I also read key UK veterinary literature throughout the study and hand-searched contents pages for relevant content.

I also attended conferences, symposia and other meetings during the course of this study and conducted focussed searches for relevant research following these.

A systematic review was not performed. The benefits of systematic review, particularly assessment of bias in included studies and identifying knowledge gaps, would have been beneficial. A review was not performed because of the breadth of the aims in this study, and multiple research questions developing from those aims. I did not have resources to perform multiple systematic reviews following the review of the breadth of the literature relevant to this study.



Through the rest of this chapter I review this literature. Further literature in key areas is cited throughout the thesis. Literature searches for this study were conducted up to and including October 2019.

## **2.3 Veterinary student mental health, wellbeing and suicide**

Concern has been raised at the prevalence of depression and anxiety (Hafen et al., 2006), and the levels and effects of stress and burnout in veterinary students (Collins and Foote, 2005, Gelberg and Gelberg, 2005, McLennan and Sutton, 2005, Strand et al., 2005, Hafen et al., 2008, Kelman, 1978, Chapman, 1979, Arluke, 1997, Powers, 2002, Elkins, 1984, Williams et al., 2005). Academic, professional, interpersonal and intrapersonal factors have been cited as contributing to veterinary student stress.

In a study at Murdoch University, Western Australia, Kogan (2005) investigated stress levels, causes of stress and coping strategies in veterinary students and found that students experienced frequent stressors and felt at least moderately stressed. Academic stressors and perceived responsibilities attached to moving into practical or professional areas were associated with higher levels of stress in students.

Research on the prevalence of mental ill health and suicide in veterinary students suggests that students may have elevated rates of mental ill health and stress than the general population; however comparative studies have had some conflicting results.

Hafen and others (2006, 2008) performed a longitudinal study at time points across semesters with first year veterinary students at Kansas State University, USA, and found that 32% of first-year veterinary students who took part in the study were experiencing clinical levels of depressive symptoms. 15% of the sample showed an increase in depression of at least one standard deviation during the study (data collection was at semesters one, two and three during an academic year). However the study's longitudinal design was anonymous and different numbers of students participated in different semesters of the study.

Reisbig (2012) followed three veterinary cohorts from two US universities through their first three semesters of study. There were 304 participants overall however not every student participated during each data collection period and the total number of responses for each data collection varied, with only 69 students participating in all three semesters. The study also did not follow individual students over time. Across all three semesters, participants reported depression levels at or above a designated clinical cut-off (49%, 65%, and 69% participants respectively).

Drake (2012) investigated the prevalence of anxiety and depression in a sample of US veterinary students across four year group cohorts. The study was however cross-sectional rather than longitudinal in design. The study found elevated scores of anxiety and depression across the four year group cohorts. Perceived physical health, unclear expectations, difficulty fitting in, heavy workload, and homesickness were most relevant in explaining anxiety and depression symptom prevalence. However the number of students participating in the study (142) was only one third of the student body, so there is risk of selection bias.

Nahar (2019) surveyed veterinary students in the South Eastern US and found high levels of depression, stress and anxiety, finding that female gender and grade point average below 3.0 were significantly associated with stress.

In the UK, studies at two UK veterinary schools (Allister, 2011, Cardwell et al., 2013) looked at mental health, wellbeing, experience of self-harm and suicidal thoughts and behaviour in undergraduate veterinary students. In Cardwell's study 509 students from five year groups participated, giving an overall response rate of 48%. The lifetime prevalence of self-reported mental health problems was 54.3% (265/488; 95% CI: 49.8 - 58.8). However this question included options such as low self-esteem, not recognised as a diagnosable mental health condition, and so is not directly comparable to other figures. Low self-esteem was the most commonly reported difficulty followed by depression and anxiety. For each of the specific problems other

than personality disorder, more than half of students reported first experiencing the problem before starting vet school. The lifetime prevalence of suicidal thoughts was 25%, similar to that reported by Bartram et al. (2009a) in UK veterinarians (21.3%;  $p=0.1$ ) but significantly higher than that reported in the English general population (16.7%;  $p<0.001$ ) (Nicholson et al., 2009). However, there should be caution in interpretation due to the demographics (especially age and gender matching) of the comparison group.

In a study at another UK vet school, performed 2 years earlier, Allister (2011) found 38.7% of students had experienced suicidal thoughts in their lifetime, with 13.2% of students experiencing suicidal thoughts in the past 12 months (response rate 97%,  $n$  participating = 106/109). 24.8% of veterinary students had personally experienced a mental health problem in their lifetime, with the majority of those who had experienced a mental health problem suffering with affective disorders (76.9%). Eating disorders were also significantly represented (11.5%). 17.3% of students in the study had self-harmed in their lifetime, 8.7% in last year. 2.8% of the students had attempted suicide in their lifetime. The rate of suicidal thoughts is higher than the rate found in Cardwell's study and higher than that found in the general population comparison group. Reasons for this could include the higher response rate reducing non-responder bias, or because Allister's study focused on one year group cohort - those in their penultimate (4<sup>th</sup>) year of study, who may be at elevated risk - whereas Cardwell's study looked at all year groups but had a much lower response rate. Further work, including comparisons with other UK vet schools, would be useful to further investigate these findings.

In Cardwell's study, psychological distress was measured using the General Health Questionnaire-12 (GHQ-12). Students had significantly higher levels of psychological distress than the general population using bimodal GHQ-12 scoring (students 32.7%; general population 19.5%;  $p<0.0001$ ). Wellbeing, measured using the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) was similar to that found in UK veterinarians by Bartram (2009a) (mean: 48.9; 95% CI: 48.5 - 49.3;  $p=0.2$ ), but poorer than the general approximately

age matched general population comparison group (mean 50.6; 95% CI: 50.1 - 51.2;  $p < 0.001$ ). These findings were similar to those in Allister's (2011) study where the mean WEMWBS score for vet students was 49.35, and 29.2% of vet students scored above the psychiatric morbidity threshold (4+) using GHQ-12 bimodal scoring.

However when Lewis and Cardwell (2019) compared veterinary, medical, dentistry, pharmacy and law students they found that veterinary students experienced relatively positive wellbeing and mental health and that the poorest wellbeing was found among law students. However law students had the lowest response rate in this study: 18% ( $n=291$ ) compared with 68% ( $n=821$ ) for veterinary students which may have introduced bias in sampling.

A 2008 survey of UK vet students by the Association of Veterinary Students (AVS), suggested that, of those students who reported having suffered from depression or anxiety, 60% named the veterinary undergraduate course as the main contributory factor to their mental health problems (BVA/AVS, 2008). This result is apparently supported by McLennan and Sutton's (2005) study of vet students' perceptions of stress at an Australian university. The AVS survey also raised concerns about the effect of the increasing level of debt facing veterinary students on graduation.

Despite many of these studies, performed at different vet schools and in different countries, suggesting possibly elevated rates of psychological distress, suicidal thoughts, and depression among vet students, conflicting results have also been found. Witte (2013), in a study looking at attitudes to death and euthanasia in vet students, as an ancillary aim studied the prevalence of mental ill health and experience of self-harm in a sample of veterinary students at a US university. Witte compared the vet student sample to data from other undergraduate populations and others from the general population and found similar levels of depression, borderline personality disorder symptoms, problematic alcohol use, lifetime prevalence of self-harm, suicide attempts and 12 month prevalence of suicidal thoughts. However the sample was small - only 130 respondents - and it was unclear

from the study what response rate this represented from those who were invited to participate, raising the possibility of selection bias. The comparison groups also may not have been well matched with the professional graduate students like the vet student sample. Other authors have suggested the literature is unbalanced and have called for more research on resilience in veterinary education (Cake et al., 2017).

There has been a small amount of work looking at access to support and interventions for veterinary student mental health with Pickles and colleagues (2011) looking at potential barriers to access student counselling and other support resources, and Mellanby and colleagues evaluating suicide awareness programmes delivered to veterinary students (2011).

## **2.4 Mental health and transition to veterinary work from university**

There is increasing evidence that veterinary surgeons under 35 years of age may be most at risk of poor wellbeing (Platt et al., 2012b), and that the time of transition to practice from training is the time when vets may be most likely to first experience suicidal thoughts (Platt et al., 2012a). However, despite concerns about the difficulties experienced at transition, there is a lack of research about wellbeing in new graduate veterinary surgeons and little evidence is available about wellbeing at this specific career point.

In a study with recently graduated UK veterinary surgeons (Mellanby and Herrtage, 2004) mistakes led to a variety of effects in individuals including, cynicism, burnout, depersonalisation and academic dishonesty. Attrition from the profession has also been discussed in the context of mistakes in new graduates (Heath, 2008).

Attrition in recent veterinary graduates is a significant concern. In a study with Australian veterinary graduates who graduated in 2005, Heath (2008) found that 7% left their first job within 6 months, 25% left in the first 12 months, and that only 28% planned to stay for more than 24 months.

In Platt's study UK veterinary surgeons with a history of suicidal thoughts or behaviour (Platt et al., 2012a), three out of 21 participants suggested that the transition to veterinary working life was a likely contributory factor, and nine out of 21 had experienced suicidal thoughts for the first time as a student or shortly after graduation. Fewer than 25% of participants had thought about suicide as a teenager.

Vetlife Helpline, an anonymous confidential support service for vets, found that where the age of the caller was known, 60% of calls to Vetlife Helpline were from callers <30 years of age in 2012 (Vetlife Helpline 2013, personal communication).

There have been few studies of veterinary transition and none looking specifically at mental health. Perrin (2016) looked at veterinary identity in students and early career veterinary surgeons. The findings from this study are discussed later.

## **2.5 Veterinary mental health**

Platt's (Platt et al., 2010, Platt et al., 2012b) systematic review suggested that there was little evidence that veterinary surgeons suffer from exceptionally poor mental health or high levels of stress compared to the general population, although certain subgroups were identified as being at particular risk. Female vets, younger vets and those working alone rather than with others were at increased risk of suicidal thoughts, mental health difficulties and stress (Platt et al., 2012b).

The review found that there was a deficit of high quality empirical studies on veterinary mental health. A number of subsequent empirical studies have been performed, Fritschi et al (2009) found that one third of the Australian veterinarians they surveyed had poor psychological health (GHQ-12 score greater than 2). Bartram et al (2009b, 2009a) found higher levels of anxiety and depressive symptoms among UK vets than the general population as measured by the Hospital Anxiety and Depression Scale, (probable cases 26.3% and 5.8% respectively compared with 12.6% and 3.6% in the general

population data), as well as higher 12 month prevalence of suicidal thoughts (21.3% in vets compared with 3.9% in the general population), less favourable psychosocial working conditions in relation to demands and managerial support, lower levels of positive mental wellbeing, and higher levels of negative work-home interaction (Bartram and Baldwin, 2010).

In another UK study looking at 646 UK veterinary surgeons, Halliwell and colleagues (Halliwell et al., 2016) found lifetime and last year prevalence of mental health problems and self-harm at levels lower than would be expected in the general population, but a higher lifetime (21.2%) and last year (8.7%) prevalence of suicidal thoughts. Estimates of suicidal thoughts in the general population vary: Nock estimates 9.2% lifetime prevalence, and Gunnell 2.3% last year prevalence.

In a study of Australian vets, Hatch (2011) found higher levels of depression, and stress and burnout than the general population. Vets were overrepresented for psychological distress, depression and stress but not for anxiety. Hatch found that the main determinants of risk were female gender, years after graduation (risk decreasing with time), companion animal, mixed or equine work, or being an associate in a practice (Hatch et al., 2011).

A Centre for Disease Control and Prevention study on US veterinarians' mental health and suicidal thoughts (Nett et al., 2015a) found that veterinarians experienced higher rates of psychological distress, suicidal thoughts and depressive episodes than the general population, but a lower level of suicide attempts. However despite being one of the largest quantitative studies of veterinary mental health with over 11000 participants, the population size for the study was also large (approximately 76,000) and which may have introduced response bias. Kassem and colleagues looked at attitudes to mental health among US veterinarians and found negative attitudes towards treatment effectiveness and negative attitudes to social support (Kassem et al., 2019).

## **2.6 Occupational stress and burnout among veterinary students and early career veterinary surgeons**

Concern has been raised regarding relatively low levels of psychological wellbeing (Bartram and Baldwin, 2008), compassion fatigue (Cohen, 2007), burnout (Chigerwe et al., 2014, Mastenbroek et al., 2014b, Mastenbroek et al., 2014a) and perceived and reported high levels of occupational stress among veterinary students (Williams et al., 2005), young veterinary graduates (Heath, 2008), and the wider veterinary profession (Zuziak, 1991a, Bartram and Baldwin, 2008, Fritschi et al., 2009, Heath, 1998b, Jeyaretnam et al., 2000, Reijula et al., 2003, Zuziak, 1991b, Stockner, 1981, Denholm, 1981, Robinson and Hooker, 2006).

Studies have suggested that in veterinarians, occupational issues are closely related to mental health. Job satisfaction, job and non-job activities explained a significant proportion of unique variance in mental health (Hesketh and Shouksmith, 1986).

Veterinary burnout has been the subject of much research attention, but with mixed findings. In a US study, Elkins and Kearney (1992) found 67% of veterinarian participants showed early signs of burnout syndrome. A study of Belgian vets (Hansez et al., 2008) found that 15% of vets studied were experiencing high levels of burnout and that vets reported higher levels of work-home interaction than other working groups. The study found only moderate levels of job strain; the authors suggest that this could be evidence that the potentially stressful demands of veterinary work are mitigated by job decision latitude and job satisfaction, as theorised by Karasek (1979). In a study of burnout among veterinary surgeons in Chile reported in a news item, burnout rates were reported at 24% (2019).

Mastenbroek (2014a), in a study of 860 veterinarians in the Netherlands, found lower levels of burnout relating to exhaustion, cynicism and work engagement than a random sample of the Dutch working population. They found that male veterinarians were less exhausted and more engaged than



female veterinarians, and that exhaustion decreased over years in the job.

Job resources positively related to work engagement were professional development and skill discretion opportunities. Job demands positively related to exhaustion were workload and work-home interference.

Mastenbroek also constructed a customised questionnaire to measure burnout - the Veterinary Job Demands and Resources Questionnaire (Vet-DRQ) (Mastenbroek et al., 2014a)

Moore studied veterinary teams in Canada (Moore et al., 2014) and found that while overall job satisfaction was good, all team members not just vets were at risk of burnout. They found that a coordinated team environment was associated with decreased cynicism and increased professional efficacy, with good communication including people working toward the same goals, a team effort working with clients, and recognition of individual contributions to the team. A toxic team environment was associated with decreased job satisfaction as well as increased cynicism and exhaustion. Toxic environments involved both co-workers and the job itself (Moore et al., 2014). Team environments and local culture in animal facilities also affect the systems of meaning people working with animals develop and maintain and affect and the way that they define the roles of animals in their care, and behave towards animals and reach other (Arluke and Sanders, 1996, p130).

Kersebohm and colleagues' (2017) study of factors influencing work and life satisfaction among German vets found that a "good working atmosphere", "reasonable salary", holidays and leisure time contributed to positively to work and life satisfaction, and that work satisfaction of employed practitioners is closely linked to satisfaction with colleagues.

In a study of the veterinary working environment in Finland, Reijula and colleagues (2003) found that vets experienced work-related fatigue, stress and exhaustion as well as physical risks including the risk of workplace injury.

Recent research exploring risk factors for suicide among veterinarians have suggested several work and non-work related contributory factors to poor psychosocial wellbeing (Bartram and Baldwin, 2010, Platt et al., 2010, Platt

et al., 2012b). Occupational stressors included managerial aspects of the job, long working hours, heavy workload, poor work-life balance, difficult client relations, financial issues, client demands or expectations, area of work, euthanasia, professional support, job satisfaction, career change (either within the profession or to another profession), general work-related stress, delivering bad news and 'other' factors (Platt et al., 2010, Platt et al., 2012b). Several studies also suggested subgroups of the profession - particularly young and female vets - are at greatest risk of negative outcomes such as job dissatisfaction, mental health difficulties and suicidal thoughts (Dean et al., 2008, Platt et al., 2010, Platt et al., 2012b).

A number of authors have discussed broader measures of stress, burnout and job satisfaction in the veterinary profession (Johnson et al., 2005, Aasland and Falkum, 1992, Andrus et al., 2006, Anonymous, 1991a, Antelyes, 1988, Anonymous, 1991b, Gloyd, 1994, Hannah, 1992, Denholm, 1981, Robinson and Hooker, 2006). In Gardner and Hini's (2006) study of New Zealand vets, the main sources of stress reported were reported to be: hours worked, client expectations and unexpected outcomes. Other stressors also included the need to keep up knowledge and technical skills, personal relationships, finances and their expectations of themselves.

In a study of German vets, Harling (2009) found that when asked about psychosocial stressors the respondents rated the items "time pressure due to a heavy workload" (26.7%), "difficulties in balancing professional life and private life" (24.1%), "dealing with difficult customers" (22.5%) and "insufficient free time" (22.4%) as highly or very highly stressful, and 8.3% of participants reported intense psychosocial stress. The study also found that vets less than 54 years old were more likely to report psychological stress, as were vets working in practice.

Bartram (2009b) found that the number of hours worked and making professional mistakes were the main contributors to stress in a sample of UK veterinary surgeons. Good clinical outcomes and relationships with colleagues were the greatest sources of satisfaction, and less favourable

working conditions were associated with anxiety and depression. The study also found that the veterinary sample had less favourable psychosocial work characteristics than the general population, with higher risk of work-related stress for the areas of demands and managerial support as measured by the Health and Safety Executive Management Standards Indicator Tool (Bartram et al., 2009b).

A study of US veterinary surgeons found that 87% reported their job as stressful and 67% demonstrated symptoms of the beginnings of burnout syndrome (Elkins and Kearney, 1992). In Platt's interview study with 21 UK vets with a history of suicidal thoughts or behaviour 15/18 participants who were working at the time of their most serious suicidal thoughts or behaviour thought that work had been an important contributory factor (Platt et al., 2012a), identifying workplace relationships, patient issues, career concerns, number of hours, volume of work and responsibility impacting on their suicidal thoughts or behaviour, though a number were also experiencing difficult life events concurrently.

## 2.7 Veterinary suicide risk

The suicide rate in the UK veterinary profession is one of the highest of all occupational groups and around three times that of the general population, as measured by PMR (Stack, 2001, Mellanby, 2005, Meltzer et al., 2007, Platt et al., 2010). This elevated rate is seen in several countries around the world, including the USA, Norway, England and Wales, Scotland and Australia (Blair and Hayes, 1982, Mellanby, 2005, Kinlen, 1983, Hem et al., 2005, Blair et al., 1980, Jones-Fairnie et al., 2008, Stark et al., 2006, Platt et al., 2010, Tomasi et al., 2019, Witte et al., 2019). Other studies have not supported this finding among vets in Denmark (Hawton et al., 2011) where vets were not at increased risk, or New Zealand (Skegg et al., 2010) where male vets were found to be at low risk.

A systematic review of international literature in May 2008 (Platt et al., 2010) identified 19 studies of suicide prevalence in vets. An elevated risk was found

in 14/15 studies presenting risk of suicide in vets with a comparison population. The better quality studies with the lowest risk of bias indicated that in the UK, the rate of suicide in the veterinary profession was at least three times that of the general population.

In the US a retrospective review of the National Violent Death Reporting System for deaths 2003-2014 found SMRs for suicide for male and female vets of 1.6 and 2.4, and 5.0 and 2.3 for male and female veterinary technicians or technologists (a role similar to but not the same as Registered Veterinary Nurse in the UK). They found that suicides of veterinary assistants or lab worker were not more common than the general population. Poisoning was the most common method of suicide and pentobarbital was the drug most commonly used, suggesting measures around means restriction may assist in suicide prevention (Witte et al., 2019). Also in the US, Tomasi and colleagues (2019) assessed PMRs for suicide for US veterinarians from 1979-2015, finding PMRs for suicide for all vets of 2.1 and 3.5 for males and females respectively. For those in clinical positions this was 2.2 and 3.4 for males and females respectively and for those in non-clinical positions 1.8 and 5.0 for males and females respectively.

Stack has proposed a model for understanding occupational suicide risk which incorporates four major determinants: internal occupational stress, pre-existing psychiatric morbidity, demographics, and differential opportunities for suicide (Stack, 2001). Occupations such as veterinary medicine, which are characterised by dependence on clients for their livelihood, and occupations with high levels of job-related isolation, are associated with increased suicide risk (Stack, 2000).

There is a large body of evidence to suggest that psychosocial factors at work, especially job demand-control (Karasek and Theorell, 1990) and effort-reward imbalance (Siegrist, 1996), have a major impact on health. Karasek (1979) hypothesised that a combination of high job demands and low control or autonomy over one's work leads to job strain, which in turn increases the risk of becoming ill. Certain occupational roles may also attract individuals

more at risk of suicide, partially accounting for an occupation's high suicide risk (Stack, 2001).

Factors contributing to veterinary surgeons' risk of suicide have been much debated. A systematic review of the literature in 2008 (Platt et al., 2010) found few studies investigating suicidal behaviour and mental health difficulties in the profession, with the majority of studies looking at stress and occupational difficulties. Low response rates, lack of appropriate measures and an absence of longitudinal studies limit the validity of evidence currently available.

Commonly suggested risk factors for suicide among vets include occupational stress, professional isolation and reluctance to seek help for problems, increased prevalence of mental health disorders, and relatively easy access to the means for suicide (Platt et al., 2010). A number of other factors have been suggested as possible influences on veterinary risk including: attitudes to death and euthanasia, factors around the transition to practice (Platt et al., 2012a), debt and financial pressures, selection factors as a result of the personality of those attracted to and selected into veterinary training, effects of training, suicide contagion, complaints, disease epidemics, a perceived lack of other career options, effects of gender (Bartram and Baldwin, 2010), stress and burnout (Hatch et al., 2011) and alcohol and drug use (Skipper and Williams, 2011). Rigorous evaluation of these risk factors is still lacking. This review focuses on the most commonly suggested risk factors.

### **2.7.1 Access to means**

Platt's (Platt et al., 2010) systematic review of suicidal behaviour in veterinary surgeons highlights a number of studies over a significant time period which suggest veterinary surgeons' access to means may impact upon their suicide risk. However few studies have been done in which the methods used for suicide by veterinary surgeons have been compared to the general population (Hawton et al., 2011).

Hawton's (2011) study on Danish suicide registers found that although, unusually among veterinary surgeons, vets in Denmark do not appear to be at elevated suicide risk, there does appear to be increased use of firearms in veterinary suicides in Denmark compared to the general population (Hawton et al., 2011).

Although it appears access to means may affect professional risk, as Hawton (2011) states, causal pathways should be attributed with caution. Not all veterinary suicides involve methods related to veterinary work. As Platt (2010) observes, evidence from other occupational groups, including groups where there is access to means of suicide but no increased risk (Stack, 2001), and studies where methods relating to occupation – such as doctors suicides by self-poisoning with medicinal drugs - are excluded, but risk still remains elevated (Agerbo et al., 2007), suggest that other factors such as occupational difficulties and prevalence of mental ill health may also account for elevated suicide rates. In a study with UK veterinary surgeons who had attempted suicide or experienced suicidal thoughts, none of the participants felt that access to means was solely responsible for veterinary risk (Platt et al., 2012a).

The two most common methods of suicide used by veterinary surgeons are self-poisoning and firearms (Kelly and Bunting, 1998, Meltzer et al., 2008, Platt et al., 2010). There are a number of reports of veterinary drugs as suicide agents by veterinary surgeons (Remain et al., 2003, Clark and Jones, 1979, Cordell et al., 1986, Clutton, 1985, Hantson et al., 1996, Hantson et al., Kintz et al., 2002, Musshoff et al., Cantrell et al., 2010, Stowell, 1998, Zanif et al., 2012, Perrin, 2015).

In a study with UK veterinary surgeons who had attempted suicide, Platt (2012a) found that seven of nine individuals in the study who had attempted suicide had done so by self-poisoning. Drugs used for attempts included anaesthetics obtained at work such as pentobarbitone, propofol, phenobarbitone, or painkillers. Two attempts also involved diazepam. Eight of the 12 participants in the study who had experienced suicidal thoughts but

not attempted suicide said that they had considered the method(s) they might use and the most common method considered was self-poisoning. Some participants in the study stated that their occupation had influenced their choice of method: "...If I hadn't been a vet and didn't have access to pentobarbitone or other methods, it would have been much more difficult to consider suicide" .

## **2.8 Professional isolation and reluctance to seek help for problems**

Several studies have suggested that veterinary surgeons may experience difficulty in help-seeking (Bartram and Baldwin, 2010, Bartram et al., 2010, Kassem et al., 2019, Platt et al., 2012b, Platt et al., 2012a).

There is some evidence of stigma against mental health problems in the UK veterinary profession. Studies at two UK veterinary schools (Cardwell et al., 2013, Allister, 2011) looked at attitudes to mental health problems using statements from the Well? Questionnaire, a Scottish population-based survey. These revealed attitudinal differences among the veterinary students from the general population particularly in areas that suggested concern about stigma, blame and lack of supportive response to those with mental health difficulties.

In keeping with these findings, the 2008 British Veterinary Association/Association of Veterinary Students (BVA/AVS) survey of all UK vet students (BVA/AVS, 2008) found that of those veterinary students who reported having suffered from stress, depression or anxiety, 74.1% said they had never sought help.

There may be other difficulties experienced by veterinary students and veterinary surgeons in accessing help for mental health difficulties. Kogan and McConnell (2001) discussed the paucity of in-house counselling at vet schools, and the difficulties veterinary students experienced in accessing help services due to the time demands of the veterinary course. The requirement for EMS placements, often in rural or remote areas, can make

continuity of access to services difficult for veterinary students and the range of services available to people with mental health problems in rural areas tends to be limited (Gregoire, 2002, Gregoire, 2001), a factor which may also affect practising rural vets.

In a study of UK veterinarians with a history of suicidal thoughts or behaviour, Platt (2012a) found that half of participants had not talked to anyone about their problems because they felt guilty or ashamed. Two participants were worried that if they talked to people at work about their problems they might face losing their job or the ability to practice veterinary medicine.

## **2.9 New graduate vets' expectations and experiences of work and of support at work**

In a study of French veterinary students, Sans (2011) suggested that many students made these career choices early in their training. Analysis of factors influencing veterinary career choice have tended to focus on the undersupply of veterinarians for food safety, production animal medicine, and public health and global disease control and prevention (Andrews, 2009, Lenarduzzi et al., 2009), or on the merits of different educational approaches (Walsh et al., 2009, Klosterman et al., 2009).

Some studies examining factors influencing career choice among veterinary students have had a wider scope; in a study of recent UK veterinary graduates, Kinnison and May (2013) looked at upbringing location (rural or urban), school type, gender, intercalation, graduate entry, year of entry, and career preference. They found gender differences, with lower percentages of females in farm and equine practices, and an association between upbringing location and type of practice, with individuals who lived in urban areas as children preferring small animal practice and those from rural areas more likely to choose farm animal practices.

Among UK veterinary students, the most commonly reported attractions to studying veterinary medicine are: working with animals, exposure to a veterinary role model through taking a sick animal to visit a veterinary



surgeon, and the perception of a varied or rewarding job (Tomlin et al., 2009, Tomlin et al., 2010). In Tomlin's (2009) study, when controlling for gender females were more strongly influenced by owning animals ( $P=0.014$ ), and men were more positively influenced by the challenging reputation of the course. The main concerns about veterinary career choice were making mistakes and balancing work and home life. In a study at Washington State University, USA, Martin (2003) also found that the human-animal bond (HAB) was influential in veterinary students' career choices, with students aspiring to food animal careers and "traditional" surgical track training rather than "alternative" tracks attaching less value to some aspects of HAB. Females also attached more value to HAB than males. Tracking does not exist in the same way in UK veterinary training but extramural studies, choice of electives and postgraduate training routes may be influenced by HAB in a similar way.

Perrin found that veterinary students were motivated primarily by animal care and welfare (Perrin, 2016) but that this contrasted with a permitted narrative about science and high achievement.

Tomlin (2009) explored veterinary students' anticipated career direction, motivations and understanding of a career in practice and found most students wanted to pursue a career in general practice, and that other veterinary career options were not well understood. Tomlin (2009) also looked at veterinary students' expectations of practice and suggested that in general, undergraduate students had a realistic view of average weekly working hours, out of hours duties and the development of their remuneration packages over the course of their careers. However the study was cross-sectional in design and so did not extend to exploring whether these expectations differed from participants' own experiences when they later entered veterinary work. It also did not explore other aspects of veterinary work and expectations beyond salary, working hours and out of hours duties, such as workplace relationships or workplace support or what impact these expectations and experiences had on mental health and wellbeing.

Despite debates around career choice, and concerns around new graduate mental health, there have been few studies examining new graduate vets' expectations and experiences of support at work.

Rhind and colleagues (2011a) looked at attributes valued by final year veterinary students and recent graduate veterinary surgeons, and found that non-technical attributes such as communication skills and integrity were highly valued by new graduates, and that final year students had some differences in the attributes they valued. However this was a survey and focus group study and was not longitudinal so could not assess change over time. In Heath's (Heath, 2008) study of new graduate vet attrition there was a relationship between the level of support in the practice and the time spent at the practice ( $P < 0.001$  for both boss and workplace support). Score distribution for levels of support did not seem to be related to the type, size or location of the practice, hours worked, income or gender.

In Halliwell and colleague's (2016) study of 646 UK early career veterinary surgeons they found that supports such as the RCVS PDP (RCVS, 2019) were not experienced as helpful and that experience of support in clinical practice included gaps in clinical support available. 16.2% of respondents said that there was never clinical support available when they performed a surgical procedure for the first time.

## 2.10 Professional identity

Although there has been little work to understand or describe the development of veterinary professional identity, in parallel professions such as medicine there has been work ongoing for many years. Socialisation theory focussed on clinical socialisation and value acquisition (Merton et al., 1957, Becker, 1976), as though starting with a blank slate and not taking into consideration individual factors, prior experience, or other factors. In one of the most comprehensive studies of veterinary identity to date Perrin (2016) found this limitation to be a particular flaw when applied to veterinary

students, highlighting the important role of motivation in understanding veterinary identity.

Other theories have looked at socialisation in a community of practice (Wenger, 2000), role modelling (Maudsley, 2001), values (Hinshaw et al., 1999), divestiture of previous identity (Bradby, 1990), and role rehearsal (Fitzpatrick et al., 1996) In a study of nurses, Davis (1975) proposed a doctrinal conversion theory with six stages: initial innocence; labelled recognition of incongruity, psyching out (playing at the role), role simulation, provisional internalisation, and stable internalisation. But again this model assumed no pre-existing state, and a blank slate.

## 2.11 Veterinary professional identity

Perrin's (2016) study of veterinary identity found among these role modelling, role rehearsal and divestiture of previous identity were all important in veterinary identity, particularly noting the role of the setting and how important EMS placements in practice were for role modelling and opportunities to rehearse veterinary roles.

Perrin's study distinguished between a large group of veterinary students who were vocationally-motivated, and a smaller group attracted by the high academic standards required. Influences on identity included the need to perform as competent and confident, role models, and presenting an approved personality type to gain access to the practical opportunities needed during training (Perrin, 2016).

In a study of career identity in the veterinary profession, Page Jones and Abbey (2015) described the centrality of career to identity for many of the participants in their study, and the early age at which identification with the veterinary profession can develop. For the participants in their study, self-identification with the veterinary profession was stronger than their identification with a particular organisation. From this, they suggest that

businesses could gain advantages from working to bring individual and organisational identity closer together.

Traditionally, professional identity and its formation was individualistic, with solo practitioners putting up a brass plate and waiting for clients (Beckett, 2011), but with the increasing corporatisation of the veterinary profession and trend towards employment rather than self-employment, individuals increasingly need to work within organisational values.

This research has wider implications. The study also found that membership of the veterinary profession influenced participants' sense of self and contributed to self-worth and self-esteem. Where self-esteem and self-worth are heavily reliant on work identity, individuals can become vulnerable when their professional identity is threatened, for example by illness, complaints, mistakes, disciplinary proceedings, job dissatisfaction or loss, or adverse clinical outcomes. Such threats to identity can have catastrophic psychological effects for individuals who have invested heavily in their identity as professionals. Mellanby and Herrtage's (2004) study of the effect of mistakes made by recent graduates showed that in many cases mistakes had a considerable emotional impact on vets. Studies focusing on doctors suggest that complaints can be experienced as a challenge to professional competence and expertise (Allsop and Mulcahy, 1998). Analysis of the impact of complaints and disciplinary proceedings on vets is lacking, but a recent cross-sectional survey of the impact of complaints procedures on the welfare, health and clinical practise of 7,926 doctors in the UK (Bourne et al., 2015) found that current or recent complaints about doctors had significant risks for the those individuals of moderate to severe depression, anxiety and suicidal ideation.

Perrin (2016) studied the development of identity in veterinary students and new graduate veterinary surgeons, and in one of very few sociological analyses in veterinary medicine found through discourse analysis that elite academic aspects of professional motivation are presented and animal welfare is silenced, although animal welfare and care is a more common

motivator. She also found strong occupational history and a bonded occupational group with an intolerance of weakness or complaint, and an attitude towards life and work that allowed little deviation, thus forcing members to internalise unhappiness or leave the profession.

Armitage-Chan and colleagues (2016, 2018a, 2018b, 2019) used analysis of postings and reflections on an online postgraduate course for vets to explore how vets defined their own career identity. They stated from this that vets are understood to be interprofessional team members, who make clinical decisions taking into account multiple stakeholder needs and work in complex environments with multiple challenges. They also found that strategies for accepting fallibility were poorly developed (Armitage-Chan et al., 2016). Armitage-Chan and May (2018a) also discussed designing curricula to support professional identity formation and postulated that given their conceptualisation of veterinary identity consistent with emotional resilience and success in practice involving complex decision making and context, that this would involve sequential development of complex thinking rather than a single best solution to a problem. In their 2019 paper they sought to define veterinary professional identity incorporating self via personal morals and values, social development via learning from the workplace environment, and professional behaviours. They assert that people who form the identity they have set out can use workplace learning opportunities to inform their identity development meaning that even in complex environments people can behave in a way in accordance with values. They go on to argue that those who “fail to connect with the environment in this way” may perceive external influences obstructing the “enactment of their desired identity” (Armitage-Chan and May, 2019).

Gaida and colleagues (2018) looked at communication identity in veterinary medicine in a study in Germany. Using grounded theory they sought to identify characteristics associated with communication identity formation among veterinary professionals. They found that communication-interaction experiences at work, interpersonal communication, acquisition of skills, and

subjective clarification of communication ability and skills were associated with the development of professional communication identity.

As with medical identity (Mavor et al., 2014), some of the norms associated with veterinary identity may undermine wellbeing. Better understanding of how vets' identity is formed and maintained, and the role of threats to identity in individual level risk, could lead to the development of more effective support for vets in difficulty.

## **2.12 Conclusion**

Despite evidence that veterinary students may have elevated rates of psychological distress and poor wellbeing, the data available is weakened by its cross-sectional nature, and in some studies by low response rates. There has been concern at the support available to veterinary graduates at their time of transition to practice, but little evidence is available about mental health and wellbeing at this specific career point.

Veterinary careers can be diverse in the nature of the work and expectations of new graduates' roles and responsibilities can vary greatly. However new vets' expectations and experiences of veterinary work are not well understood. Factors influencing decision-making around career choice are poorly understood, and how these relate to mental wellbeing in new vets is absent from the literature.

New graduate distress is consistently reported by support services such as Vetlife Helpline and aspects of transition are considered to be potentially very stressful. A greater understanding of veterinary student and new graduate wellbeing and factors and context that may influence risk of mental ill health and suicide may help identify opportunities for risk factor modification and student and new graduate support. Although there have been initiatives to increase support available to veterinary students (Kogan et al., 2012, Mellanby et al., 2011, Pickles et al., 2011, Collins and Foote, 2005, Gelberg and Gelberg, 2005, Lord et al., 2013), there has been only limited research

exploring experiences of support, and no longitudinal studies of veterinary identity at the time of transition from vet school to practice.

In the next chapter I go on to describe the methodology for the Veterinary Transition Study, and I reflect on the research process and my research practice.

## **Chapter 3 Methodology**

### **3.1 Introduction**

In this chapter I describe my research methods and practice. This study met obstacles at various key points and so this chapter also reflects on the development of the methods and my own research practice.

Section 3.1 describes the chapter

Section 3.2 describes the research design including the aims and background to the design, and health and safety.

Section 3.3 describes further ethical considerations, positionality, and my approach.

Section 3.4 discusses the recruitment and the sample.

Section 3.5 describes the data collection, interviews, field notes.

Section 3.6 describes experiences of talking about mental health in the study

Section 3.7 describes the way I approached the analysis.

Section 3.8 Summarises the chapter

### **3.2 Research design**

#### **3.2.1 Background to research design**

In Chapter 1 I set out the background to the research design and some of the current context to veterinary mental health and early career transitions in the UK. In the context of the evidence base, and the context described, it seemed that a qualitative prospective study might provide data relevant to the understanding of professional mental health, and could have some value for understanding how best to improve veterinary mental health and wellbeing.



### **3.2.2 Study aims**

The aims for this study were developed on the basis of the gaps in the literature already mentioned, to try to inform future support and interventions to help veterinary students and graduates who are struggling with poor wellbeing or mental ill health. The aims were designed to support a contribution to understanding of veterinary identity, what it is, and whether it matters in considering professional health.

The research aims of the Veterinary Transition Study are:

1. To provide insight into veterinary students' and new graduate vets' perceptions and experiences of their mental health and wellbeing during the transition from study to employment.
2. To understand veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment.
3. To explore the development of professional identity in veterinary students and new graduate vets as they move from study to employment.

### **3.2.3 Ethics and health and safety**

Ethical considerations were central in the planning of this study and revisited throughout. My background is close to the topic of research and involves running a helpline for the veterinary community and also teaching students on topics relating to wellbeing. This meant awareness of participants' wellbeing was prominent and prioritising participant wellbeing was a core value of the study from the outset. This was revisited during the study particularly during sampling, data analysis and presenting the data.

The study was approved by the School of Health and Social Sciences Ethics Committee and the Working with Students Committee of the Royal (Dick) School of Veterinary Studies.

An important consideration at the outset and throughout this study was that 18 months previously a fellow student from the prospective participants' year group had died by suicide, in year 3 of the course. This prompted detailed

consideration and planning around how best to support students in the light of this, including consideration of whether this year group should be involved in the study. I had also known the student who died. I did not mention the student during the study however a number of participants mentioned him unprompted and commented that, in the light of their peer's suicide, they were glad that student mental health was an area of study and were glad for the opportunity to express their views. Several discussed their memories and friendship with him, and how bereavement by suicide had affected them.

An important part of the process of ethical consideration in this study was consent. I was aware of stigma around mental health and fears around discrimination within the veterinary industry so saw consent as a multi-stage process. Students were able to withdraw consent at any time in the study and consent forms (Appendix 4) and an explanation of the study (Appendix 2) and information sheet (Appendix 3) were available before interviews. Written consent to take part was obtained at the time of the first interview but students were also asked to consent again verbally at each subsequent interview and were reminded they could withdraw any part of their data or completely withdraw from the study at any time. Participants were given vouchers in recognition of their time but I explained each time these were discussed that they were not conditional in any way and that participants could withdraw and keep the voucher.

Meeting participants regularly throughout the study offered opportunities to monitor wellbeing and any adverse impacts of the study. Particular concerns arose when two students disclosed suicidal thoughts or behaviour in their first interview that had occurred within the last year and which no one else at the university knew about. I took time after each interview to plan with students what other support they had available if they needed it and to ensure they were not at immediate risk. These cases were discussed in my supervision with my supervisor team, but the university was not informed and participant confidentiality respected. Both students remained safe. During another interview a participant started crying at multiple points during the interview. When this happened I stopped recording and waited until they felt better,

offering to terminate the interview. The student was adamant they wished to continue the interview and recommence recording. During the third round interviews one participant discussed suicidal plans they had made during the previous six months. They disclosed this after the conclusion of the interview in informal discussion. We continued talking and I ensured they had access to support and were in no immediate danger.

I did consider whether to involve participants collaboratively in the analysis for this study, and the potential impact on them both of being involved and not involved. I decided not to for both practical reasons and with an awareness that some have criticised collaborative approaches as exploitative or stressing (Barbour 2001, p1117). Participants were not involved in the analysis of the study but were offered access to papers and any published work. Participants' comments on the study were included in field notes and analysed.

### **3.2.4 Planning for recruitment and interviews**

The prospective cohort study design was based on the need to address the evidence gap resulting from only cross-sectional studies of student and new graduate mental health. Following individuals over time was a privilege; this study would not have been possible without the enthusiasm and commitment of the participants. The prospective cohort design meant that more than one interview was necessary with each participant, and a lot of consideration was given to both participant numbers and the timing and design of subsequent interviews. A relatively large sample for a qualitative project was chosen, with 30 being the original target recruitment. This was to fit the expectations of veterinary epistemological communities, who do not have a long history of engagement with qualitative work and are often more positivist and quantitatively focussed. It was expected that saturation would be reached by 30 and this was indeed the case, however participant numbers went beyond thirty, and the reasons for this are discussed later.

### **3.2.5 Health and safety**

Alongside ethical considerations the health and safety of participants and me as a researcher was central to this study. As well as the ethical considerations and steps taken already described, health and safety considerations were reviewed at each stage of interviews in the study. Support was available for me in supervision with my supervisory team, and on request if difficult issues arose during interviews.

## **3.3 Further ethical considerations, positionality and my approach**

### **3.3.1 Further ethical considerations**

The process of ethics committee approval for this project was not without complication. The participants were considered vulnerable by the university. Their year group had experienced a bereavement by suicide of a classmate 18 months previously and the university was concerned that the project did not cause the students any distress.

The study was approved by the School of Health in Social Science Ethics Committee but was questioned by The Royal (Dick) School of Veterinary Studies Working with Students Committee. After discussion and removal of quantitative elements the study was approved, the committee considering qualitative work to be a safer research methodology than quantitative surveys. There were concerns that a questionnaire could be too insensitive and risky, and interviews would be a safer, more caring environment for difficult issues like mental health and suicide to be researched.

Yet for me this raised questions. I had been placed by the ethics committee in the position of providing a caring, “safer” environment for people to talk, but part of my rationale for including interviews was that interviews could access data that would not be accessed otherwise. A number of authors have questioned the paradigm that interviews are somehow more ethical than other research methods. Kvale (2006) observes that when qualitative interviews came into increased use they were often observed as a

progressive dialogical form of research, egalitarian in contrast to objectivist positivist quantification of questionnaires. However, despite progressive aspects to qualitative research, Kvale (2006) suggests a qualitative progressivity myth: that qualitative interviews themselves are not necessarily good and emancipating. Although early feminist work pointed to the egalitarian progressive nature of qualitative interviews, accessing feminist emphasis on experiences and subjectivity, reciprocity and personal interaction in ways that are not possible with questionnaire data (Scott 1985, Kvale 2006), they also have exploitative potential.

Later feminist discussions have explored this, criticising the alleged ethical superiority of qualitative interviews and questioning whether the view that they are somehow free of manipulation and instrumentality is correct. A number of authors have highlighted there is an ultimate power inequality in qualitative research – in interpretation and analysis of data. Mauthner and colleagues (2002) described how interviews can instrumentalise human relations, “faking friendships”. Burman (1997) questioned the idea of qualitative interviewing as being free of manipulation and emancipatory, exploring how relationships and trust in interviewing may elicit confidences. Kvale (2006) suggests that a “fantasy of democratic relations” masks the issue of who gains materially from research and fosters an atmosphere of trust and mutuality, which may encourage disclosures from participants which would not have occurred otherwise. That a quasi-therapeutic interviewer role building on emotional rapport and therapeutic approaches can serve as a Trojan horse to get behind subjects’ usual defences into their inner worlds (Fog 2004, Kvale 2006).

This was a particularly acute reflection for me: feeling pressure from the ethics committee to be seen as a warm, egalitarian presence to make the interviewees feel safe, the quasi-therapeutic environment almost being encouraged. I also was aware that in so doing I might be encouraging more unveiled disclosures than participants would have otherwise engaged in. Fontana and Frey (2005) describe an “empathetic stance” in interviewing, positioned in favour of the individual being studied where the interviewer

becomes an advocate and partner in the study, hoping to be able to use the results to advocate social policies and ameliorate the conditions of the interviewee (p696), and this was where I tried to position myself, but the reluctance of some participants to talk about these issues was clear, for example interview 4:

“People think you’re weak and also I don’t want any sort of mental health issue on my medical records”

(Interview 4c)

Mason (2002) considers the issue of what should you let interviewees tell you, highlighting ethical issues in making the interview feel enjoyable or like a therapeutic encounter (p80) and suggests this may not be the best moral choice or academic choice (p67). I decided to try to move away from quasi-therapeutic positioning where I could, and to highlight to students at all stages of the information process where (elsewhere) they could go for therapeutic support. I did not want to be seen as a therapeutic alternative to other support services, particularly because it is a longitudinal project with multiple interviews, which might be interpreted by some as having a cathartic or therapeutic quality, and worried that if this were the case students could later feel used or abandoned by the project.

Guillemin and Gillam (2004) distinguish between procedural ethics – seeking approval from committee and ethics in practice – and every day ethical issues that arise in the practice of research, which they describe as micro-ethics. They suggest that reflexivity can be a resource, and a tool for achieving ethical practice in research. In this project I was very aware that ethics are not solely within the domain of the ethics committee, and that the sequestration of ethics to an ethics committee process risks ignoring the minute to minute ethical issues that arise in qualitative research. I tried to use reflexivity and positionality as tools to assist in ethical practice.

### **3.3.2 Interviewing in the veterinary epistemological community**

An issue that arose repeatedly for me was that of positionality, both my own, and that of my research participants.

Silverman's suggestion that we are part of an "Interview Society"; that interviews seem "central to making sense of our lives" (Silverman, 1993) is often cited. As Rapley (2004) observes, we all just know at a glance what it takes to be an interviewer or interviewee. Yet despite the ubiquity of interviews, the role of interviews in research is not well understood by many outside the field of qualitative research.

Coming from my own background as a quantitative researcher and veterinary clinician, in undertaking the Research Interviews course I was aware that I usually operate in an epistemological community – particularly the veterinary community - which largely considers subjectivity a weakness in research, and neutrality and objectivity as goals to be aspired to. This fixed value system for understanding research seems to arise from a lack of awareness of the strengths and possibilities within qualitative research.

Holstein and Gubrium (1995 p141) argue that in interviews, all knowledge is created from the actions undertaken to obtain it. That interviewing is a social encounter in which knowledge is actively constructed, rather than being a neutral forum where pre-existing information is excavated from interviewees. Mason (2002 p62-63) also describes meanings and understandings from qualitative interviewing as a co-production of interviewer and interviewees. Rapley (2004 p16) suggests that interview analysis should examine "the trajectory of talk" including the co-construction of discourses, narratives, "versions of reality", and specific identities. This idea of co-construction and the role of the interviewer in the production of knowledge was particularly interesting to me, and challenged my previous ideas about neutrality.

Fontana and Frey (2005) observe that interviewing is inextricably politically, historically and contextually bound. They suggest that interviewing cannot be a neutral tool (p695), and that goals of neutrality are largely mythical.

Holstein and Gubrium (1995) urge reflexivity not only about what the interview accomplishes but also how it is accomplished – thereby uncovering ways we go about creating a text. As Moser (2008) and others highlight, feminist theories have launched some of the strongest critiques of the “universality of objectivist social science” and the myth of neutrality. McDowell (1992) suggests: “we must recognise and take account of our own position as well as that of our research participant, and write this into our research practice” (1992 p409). Rose (1997) highlights the importance of Haraway’s (1991) work on positioning, “characterising oppressive knowledges that present themselves as universal, for example, as knowledges that claim to see everything from nowhere”. These perspectives led me to question both my own ontological position, and my positionality within my project at all stages of the interview process.

Myths of neutrality have also been examined in science and specifically in medicine. The impact of society on the construction of medical knowledge has been explored further in human medicine than in veterinary medicine. Although some have suggested medical knowledge to be culture independent and built on objective experimentation (King 1962 p93, Albrecht and Higgins 1979 p7-10), others have highlighted the social construction of medical knowledge (Bloor 1976, Bury 1986, Nicholson and McLaughlin 1987). Work prior to this also looked at the construction of scientific knowledge, emerging from a social process rather than as facts existing “out there” and waiting to be discovered. Fleck talked about ‘the genesis and development of a scientific fact’ (Fleck 1935, Kuhn 1962, Löwy 1988 p133-155). Constructivist and other epistemologies and sociology of medicine and natural sciences have existed in medicine and science for many years but positivist understandings still predominate in veterinary teaching and literature.

The idea that examining positionality and subjectivity in research could strengthen it fascinated me. As a researcher new to qualitative methodologies, but not to the area of research of my current project – veterinary wellbeing and mental health – it challenged me personally that in



my quantitative work I have been encouraged to present myself as neutral, and to an extent, detached, and yet my own positionality and interests not only brought me to that research topic as a researcher, but also influenced the methods I used and my interpretation. Like Avis (2002) I recognise myself in the process of my research, and chose my research topic for reasons relating to my own interests and professional experience. I have reflected on my positionality and my path to my current area of research previously, but this has remained unspoken. Rose's (1997) description of her moment of realisation regarding positionality resonated with me. I became aware of need to consider the subjectivity within the research relationships in my project, and the role of my own positionality. Conceptualising myself as active and reflexive in the process of data generation (Mason, 2002 p66) and being mindful of feminist theory – like Avis (2002 p192)– I aspired to be involved in what could be considered a feminist project; I started to consider the role of my own positionality in relation to my project.

It was a relief to encounter the literature on positionality and sociological and philosophical understandings of the construction of scientific knowledge, which recognised that subjectivity existed in research and that it could be examined rigorously and discussed. However this process for me was not without difficulty. Mason (Mason, 2002 p66) highlights the reflexive challenge of analysing one's own role in the research process, and I identified with Rose's (1997 p306) description of "a sense of failure", and description of "anxieties and ambivalences that surround reflexivity, positionality and situated knowledges" (p306).

### **3.3.3 Positionality in my project**

I position myself, and am positioned, in various contexts (St. Louis and Barton, 2002). I am middle class, white, British, and female. I am a veterinary surgeon, a PhD student at the same university as my research participants and of a similar educational background to them. All of these things will be seen by the participants. However, as many authors observe, these objective

characteristics do not in themselves describe my positionality. I am also positioned by my own life experiences, historical context, my sense of morality and my ethical and ontological position regarding my research, and particularly for my current project, as I am investigating mental health and wellbeing, my own experience of mental health and wellbeing. This became particularly relevant in three areas; the issue of insiderness; project set up and access; place; self-disclosure; and power relations.

### **3.3.4 Insiderness**

As a vet, researching vets transitioning from vet school to the world of work, I am an “insider”. Adriansen and Masden (2009) highlight that although insider effects may be greatest during the interview itself, they can impact all stages of the process of conducting research interviews. Saltmarsh (2011) observes that power relations and subject positioning in such research is complex and fluid, that neither insiderness nor outsidership is absolute. In the set-up of my own project this was particularly apparent to me when delivering an information seminar to potential research participants about the study. Although I am an experienced speaker and lecturer, I experienced anxiety before the seminar. Would anyone come? What if they rejected or ridiculed the project? Perhaps worse still, what if they were apathetic about a research topic important to me?

### **3.3.5 Self-disclosure and presenting myself**

The issue of self and my own positionality was a major one in conducting the pilot interviews, but it arose long before the interviews themselves, when I first proposed this project and sought PhD funding. As Moser (2008) observes “occupying certain positions and being aware of them may, for example, encourage researchers to take up projects that will place them at an advantage as an “insider”. My PhD project looks at mental health in vets during the period of transition to professional practice. I am a vet, and have

personal experience of bereavement by suicide and of supporting people with mental ill health.

Avis (2002 p192) also identified strongly with her interviewees, who were friends, and highlights how embedded and complex the issue of self is in conducting interviews. The consideration of the representation of self in the research process was one of the issues I found most challenging. How much of myself I should bring to the interviews? Avis' (2002, p193) reflection on how to come to terms with herself within the parameters of her research was useful for me: should I obscure or subsume myself? For a number of reasons, self-disclosure of the type Avis engaged in did not seem the right fit for me and this project. Although students knew I was a vet, I decided not to talk about my own experiences in the interviews or when presenting the project to the participants. This was partly because of my own needs. I wasn't sure how I would cope with disclosure, and was concerned, given the highly stigmatised nature of mental ill health among vets that it would affect what students felt able to talk to me about. In the third interview of the pilot, the student made comments which made me glad I had chosen this position. In discussing support mechanisms which she had used or chosen not to use, she mentioned peer support, a formalised system in the vet school:

Participant: I think the one that I'm steadfastly against is peer support. And it's not because I don't think it's beneficial, it's because it's by peers. And they're not trained to deal with things that people like me would be approaching them with. So, you know, I think it's a great idea but I think it needed to be a bit more, it needs to be overseen by someone a bit more, that has a bit more professional knowledge. [...] If I went to people with some of the problems I've got, I think, I don't think they'd know what to do with themselves, you know! I think it'd break a few of them!

Interviewer: It almost sounds like you feel you'd be too much for them?

Participant: Yes, and I know that some of the people on peer support, which I mean is not reason not to include them, but they've got severe problems of their own and

you just think ‘why are you putting yourself in a position for me to dump my problems on you?’

(Interview 3a)

Later in this interview the student disclosed a suicide attempt and experience of mental ill health. I wondered if they would have felt able to talk about this if they knew of my own experience of suicide bereavement, given the views they expressed. However, after reflecting on my own positionality I did explain more of my interest in and background to the participants than I had originally expected to.

### **3.3.6 Power relations**

Power relations in interviews have been widely discussed. The asymmetry of the analytical power of the researcher (Rose 1997) can lead to resistance from participants. I used my positionality to try to make adjustments to difficulties with power relations in my pilot interviews. A number of interviewees were supplicant and eager to please, too much so, seemingly wanting to give the “right” answer, to talk the “right” amount, and apologised to me several times each:

Interviewer: Thank you for answering all of those.

Participant: Word vomit, sorry.

(Interview 1a)

With these interviewees I tried to reposition away from being seen as university staff and to equalise power relations by trying to offer some reciprocity, asking them if they wanted to ask me any questions. In interview 3, after having said she had nothing else to say, inviting her to ask me a question resulted in a short answer from me, then a further 2000 words of dialogue from her. I wondered if the slight shift in the power asymmetry had helped her to feel more able to talk.

The other interviewee of the three pilot interviews displayed more obvious resistance; he was challenging from the start:

Interviewer: So thank you for agreeing to be interviewed

Participant: Is this your first one?

(Interview 2a)

At points this was joking, when arranging details of the subsequent parts of the study:

Interviewer: Is it alright for me to contact you again around graduation and then in..?

Participant: Are you coming to graduation?

Interviewer: I've not been invited.

Participant: Come along, I'll invite you.

(Interview 2a)

But at others more facetious, whilst talking about what sort of support the participant would expect in a first job:

Participant: I'd like a nice boss. I think that's what matters.

Interviewer: And what would your nice boss sort of look like?

Participant: Like Jesus, God knows what Jesus looked like!

(Interview 2a)

The participant also stood up at various points during the interview and tried to look at the written topic guide I was holding. In this instance whilst engaging with the humour I also found myself needing to use positionality to

increase personal distance and take some control to re-establish myself as the interviewer.

### **3.4 Recruitment and the sample**

#### **3.4.1 Recruitment**

All 156 students in year five (final year) of the veterinary course at the time of the study were sent the study information sheet (Appendix 3) by email and invited to attend an information event held at the vet school where they would have the opportunity to ask questions and hear more about what was involved in the study. This event was held on the 24<sup>th</sup> January 2014 in a lunchtime seminar slot for final years. Attendance was optional (Appendix 2 for invitation).

Thirteen students attended the event. I briefly explained the study and encouraged questions. One student asked whether the study highlighting support needs for new graduates – an outcome they anticipated – would make new graduates less employable and whether veterinary practices might start to preferentially recruit vets with several years' experience instead. This reflection on concerns about how needing support might be perceived later came to be a major theme in understanding veterinary identity in the analysis. Students also asked why I was collecting any demographic data – I collected only age and gender (described later in Table 3-1). They were concerned this could be identifying, and linked to mental health data collected during the study. The theme of stigma around mental health and concern at being identified were themes that were generated from interview data too.

Students at the event were given copies of the information sheet and consent form to take away and consider whether to participate. Immediately after the seminar three students emailed me to say they wanted to participate. I then sent a reminder email to all students letting them know recruitment was now open and held initial recruitment open for 10 days. The invitation made clear

that if they consented to participate, they were free to withdraw at any time prior to submission or publication, and their data would be withdrawn.

I was surprised by the students' level of interest and engagement with the study. A concern of the school had been study fatigue, and this study had to be timed to avoid other studies and questionnaires being done with the students. However during the next 10 days a number of students emailed not only to accept the invitation to join the study but also included comments about why they felt that they should be included or why they felt the study was important. I had included questions on the consent form (Appendix 4) which included age, gender, the type of practice the person was interested in and whether they planned to work in the UK after graduation. The purpose of this was in case of a large number of applicants to enable selection of a range of experiences, and to better understand the sample recruited.

I anticipated that between 20-30 participants would be needed to reach saturation while having a manageable amount of data for analysis. Thirty people initially volunteered initially, however once interviews commenced there was a snowball effect with six further students requesting to join the study. They said that their friends had recommended it to them. After consideration, anticipating high attrition even at first interviews, I recruited these six students to the study too.

All thirty-six students took part in the first interview. These interviews were held between February and April 2014. Participants reported a wide range of motivations for taking part. Some wanted personal help, many expressed a general interest in the topic of mental health, and some wanted to give a counterpoint to discourses they had heard around wellbeing.

Participants received Amazon vouchers in recognition of their time: £20 for round one, £10 for round two and £20 for round three.

I held three interviews as a pilot for the semi structured interview topic guide, however this continued to be developed as interviews progressed. The pilot participants' data were included with the other interviews for analysis. Before trialling with the three pilot participants the topic guide was also reviewed by

my supervisory team and two newly qualified vets whom I knew, who made comments.

### **3.4.2 Conducting the interviews**

Participants' availability for interviews was very limited, and I fitted around their timings, including multiple short notice cancellations because their attendance at clinics as part of their course had overrun. There was a sense of anxiety from students around balancing commitments and I assured them that their placements could always take priority, and I would fit around their needs. There was individual negotiation with each student around the location for the first interview, which was conducted face-to-face. I offered lunchtime, evening, weekend and early morning timings to fit around their study commitments. The first interview took place in February 2014.

The subsequent thirty-five interviews in the first round took place over the following 3 months. Due to interviewees limited availability I took the pragmatic compromise of performing two interviews per day, at most three. However in hindsight one interview per day would have been better and I kept to this for second and third round interviews.

### **3.4.3 The sample**

The sample included 30 females and 6 males, 83% female and 17% male. The year group had 32 males of 156, 80% female and 20% male. The age range in the study at the outset was from 21-31 years with a mean age of 24 years.

The sample is not discussed in further descriptive detail here because data on ethnicities and other demographic data would identify participants to people who knew the cohort. Throughout this study not identifying participants has been a priority, and details in parts of the transcripts have been redacted to obscure identifying data.



**Table 3-1 Demographics of the study sample**

	Male	Female
Number of participants	6	30
Age range (years) at start of study	22-28	21-31

When quotes are presented in this study participants are described by their individual study identification number from 1-36, with a, b, or c denoting whether the quotes were from the first, second or third interview. For example Interview 1a indicates participant 1, and their first interview. Interview 36c would be participant 36, in their third interview, and so on. When presenting quotes where other text has been removed this is indicated by the use of [...], and where participant language or grammar has been unusual it is included verbatim followed by [sic].

#### **3.4.4 Project set-up and access**

As Adriansen and Madsen (2009) observe, being an insider provides advantages in the planning of research. This was the case for me. Being known within the university, my own PhD being registered there, knowing which key stakeholders to approach and utilising pre-existing contacts undoubtedly made access to the student participants easier. The project had to be approved by an ethics committee and a working with students overview group. The trust my insider position afforded me, and my experience in the third sector supporting vets undoubtedly positioned me in such a way that the project was allowed to proceed. It is difficult to imagine this having been permitted if an outsider wanted to study the students.

However being an insider also caused difficulties. Students needed a lot of reassurance at all stages of the project that their participation, and anything they said would not get back to the university. For example, in the middle of the second pilot interview the participant paused and said:

Participant: This is going to go bad, I hope it doesn't get back to them.

Interviewer: No, no, it won't, nothing will.

(Interview 2a)

I found myself often shifting my position from insider to outsider within interviews; whilst using my position in the university for access I was quick to reassure students that I did not store the transcripts on the vet school site, and no one from the vet school would see any unblinded data. Whilst at some points utilising vet school links, at others I deliberately distanced myself from them.

A shared understanding of culture and behaviour due to my insider position also proved to be both an advantage and a disadvantage. Adriansen and Madsen (2009) suggest that an insider role can help with empathy and understanding interviewees' point of view. Before the pilot interviews commenced I found myself asking students about their day in clinics, and joking with them using specific veterinary humour. This felt like an advantage and facilitated rapport. However I wondered if I was too close to the subject matter to enable perspective, and found that at times participants assumed a level of knowledge, and so presented me with different data than they might if I were occupying an outsider position. Answers became implicit in their character (Adriansen and Madsen, 2009), and also at times seemed guarded. Students in the pilot interviews looked at me puzzled as I asked them about their experiences of support services within the university, and more than once apologised to me before saying something critical of the service.

These presupposed shared understandings were evident in interview 2 where the participant assumed I knew about techniques used in a professional skills class he had recently been to. I tried to reposition myself to more of an outsider role to encourage him to elaborate on his experience:

Participant: But the way they're forcing us to display this false sense of empathy, I don't agree with.

Interviewer: Right. So what do they get you to do? I've not been in a professional skills class here ever.

(Interview 2a)

Even though I am not involved in the support services, the room most of the interviews were held in was on the same corridor as support service staff. I found myself trying to ameliorate the impact of this by explaining to students that I did not know about the services - trying to reposition myself in more of an outsider role to encourage them to explain their own experiences and to try to reduce their inhibitions about being critical of services. Here in pilot interview 3, a student talks about their experience of trying to access support services. I deliberately try to state I do not know much about the services to encourage the student to talk more openly about her experience of them:

Participant: [...] And it's not that I have any resentment towards the job, it's this place! I did go and see, I don't know what they're called – a mental advisor? I don't know. Do you know the services here?

Interviewer: A little bit, but I'm not involved with them.

(Interview 3a)

After reflecting on the pilot interviews, for later interviews I went to the extent of explaining before interviews started that it might seem like I should know the answer to some questions about specifics of their course or about local support services, but that it would help me if students were still able to answer them. Explaining this did seem to reduce some of the implicit assumptions students made in their answers, although their responses were still influenced by their knowledge of me as a vet, using clinical language and veterinary acronyms.

### 3.4.5 Interview place

The location of the interviews felt important to my positionality, and how the students would view the project. Adriansen and Madsen (2009) discuss the importance of consideration of spatial context for interview locations. I considered four options: interviewing the students at home, using a non-university location, using a vet school location, and using a university but non-vet school location. The vet school is geographically distant from the central university and travel to sites outwith the vet school might have been problematic for students, but I was cautious: if I used an interview room in the vet school, would that affect what students talked to me about? I was concerned it would position the project as related to their teaching and assessment and would affect what they would say. Interviewing students in their homes raised issues of confidentiality as most students share their accommodation with other vet students and I wanted the fact of participation to be confidential if they wished. I also wondered if that would cross a line from the professional for the students and put me in a role they were unfamiliar with. This differentiation of role – seeing them in their homes and so apart from the university - may have been an advantage in helping them to feel comfortable and encouraging disclosure. It also may have helped me to resolve an issue I struggled with throughout the pilot interviews – that of the students operating as if they were on clinics and being tested, and trying to give me the “right” answer - but it would also have been a challenge for me personally, with the students in a position of relative power, highlighting the fluidity of power relations in this project.

I decided to offer students the choice of meeting at the vet school or at a central university location. In doing so I was attempting to position myself as somewhat separate from the vet school, but also understanding that the students were busy and conveying that their convenience was important to me, in an attempt to establish mutual respect and trust. This was not without complication. When room booking, I requested a quiet room away from busy areas so students could attend unseen and so that they would feel as comfortable as possible talking with me; again I was using my position to try

to increase openness to disclosure. However, the vet school architecture proved a challenge. Quiet rooms away from general teaching areas were hard to come by, and booking arrangements complex. The room I was allocated in the vet school rather than being private, had a wall made completely of glass and looked out over a corridor where other student support services were located. This positioned me firmly back in the vet school support services – something I had wanted to be separate from, and facing a battle with wall blinds! The three pilot interviews for this study at times felt very formal, and I wondered if the vet school environment contributed to this. As Adriansen and Madsen (2009) observe, “different interview sites can situate the participants in particular ways that affect the power relations of the interview experience.”

I tried to mitigate the effect of this on interviewees by explaining before the interview about study confidentiality, data blinding and how students could withdraw from the research at any stage of they wanted to without consequence, including after data collection and transcription. Students were also told before the interview that they could ask for any part, or all, of the interview to be deleted and not included in the study. On the consent form for the study I also made clear that study participation would not affect their academic progress and that no one in the school would be told which students had participated in the study. Despite all of this, students’ concerns about confidentiality were still apparent.

Three students chose to meet at the location outside the veterinary campus, and thirty three in the meeting room on the veterinary campus. For second and third round interviews all interviews were conducted by phone. By the time of the second and third round interviews a number of participants had moved outside the UK to commence veterinary work and so interviews covered four different time zones.

### **3.5 Data collection, interviews, field notes.**

#### **3.5.1 Data collection**

Most interviews were conducted in a relaxed manner, and I was aware of using insider veterinary status to help participants relax before the interview – asking about how their day had been often moved onto talking about their current placement, laughing at insider jokes and professional informal chat.

Following this I explained the study again to the participants and asked them to sign a paper copy of the consent form if they agreed to take part and explained again the process for withdrawing from the study. To date noone has withdrawn from the study or requested their data be withdrawn. I also explained about recording the interviews with a digicorder and placed this on the table where they could see it. I asked if they had any other questions before I started the recording. I also explained that I could stop the recording at any time at their request. No participants requested this during interviews but there was one interview where I stopped recording twice because of a participant crying, and another interview where I stopped recording because I thought the interview had concluded but then in a chat following the interview the participant started talking about a previously undisclosed episode of suicidal thoughts and after some talk and consideration, I asked whether we could restart the interview.

In the first round of the study the interviews took between 40 and 90 minutes. In the second round between 15 and 45 minutes. In the third round between 30 and 80 minutes.

The first round of interviews was conducted between February and April 2014, when the participants were in their final year of veterinary study. The second round of interviews were conducted between July and August 2014 when participants were 1-2 months after graduation from veterinary school. The third round interviews took place in March to September 2016 when participants were 21-27 months post-graduation.

### 3.5.2 The first interview

The first interview was designed to focus on the participants' background and "story", what motivated them, their experiences, and what they found helpful and unhelpful. There were three areas in the topic guide: experience of veterinary study, work, and health. Questions were open ended, with prompts. In the pilot interviews I struggled to keep to time in the first interview as the participant talked so freely and openly. They also arrived 45 minutes early, and so were in the room before me which wrong-footed me from the outset. The interview could easily have been an hour longer and I struggled to complete the whole topic guide. They were animated and tapped their hands on the table throughout. The second participant stood several times during the interview to make their point in an animated way, and questioned several of the questions in the topic guide. However later participants in the study seemed more settled, and timings became easier to manage, probably at least in part due to my experience with the guide and the interviews.

The questions in the first interview were:

Your experience of veterinary study:

1. What motivated you to study veterinary medicine?
2. How have you found your time at vet school?

What were your expectations of vet school before you came here?

To what extent have those expectations been fulfilled?

Has there been any support that has been particularly helpful for you?

Looking back is there any support that you didn't receive that would have helped?

3. Thinking back to when you applied to vet school, has your view of veterinary work changed since then?

4. Have you seen practice? Can you tell me anything about what that experience was like?

Work

5. Do you know what sort of work you would like to do when you qualify?
6. What attracts you to that area of work?
7. What aspects of a first job are most important to you?
8. What do you think life as a new graduate vet will be like?

Expectations of salary, working conditions, support

What has influenced your expectations?

9. What sort of support would you like to receive in your first job?
10. Some people say veterinary life can be tough and stressful, what do you think about that?

What influenced your views on that?

Your health

11. How has your health been while you have been studying?
12. How has your mental health been while you have been studying?  
What impacts – positive or negative do you think vet study has had on your mental health?  
Has anything else – positively or negatively affected your mental health?
13. Can you tell me about what aspects of your life you feel most influence your health and wellbeing

Summary

14. Was there anything else you'd like to add
15. Are you ok for me to contact you again on after graduation and in a year's time to have another talk on the phone?
16. Is there anything we have talked about that you would like removed from the transcript and deleted?

The final summary section revisited consent to retain participant contact details. I also asked about whether participants wanted me to delete any part



of the interview. This was important to allow the participants chance to withdraw, from the study or withdraw parts of their data, although no participant did. Following the interviews we had a chat about pets or hobbies or other light topics before the person left. Where a participant had been distressed during interview I took extra care to ensure they were ok and had access to support if they wanted it.

Several students seemed nervous during the early part of the interviews and expressed concern about getting questions wrong. One wrote a comment to this effect on the piece of paper they filled out with their age and gender. Several other students commented about how they wanted to take part in the study because they “wanted people to know what it was like”, and described very difficult experiences. Others said they wanted to dispel negative stereotypes. One student offered money to fund the study during the first interviews, and a different participant offered this in the third interviews. I did not request money to fund the study and declined these offers however they surprised me and subverted the power dynamics I was expecting.

Two students who disclosed suicidal thoughts in the first interviews told me that they didn't have ongoing mental health support. In conversation and safety planning after the interview both said they felt safe and not at immediate risk however I debriefed both interviews with my supervisory team, and was surprised to find participants so willing to talk to me about suicidal thoughts and behaviour which the university was not aware of. The trust participants put in me and in the study through the process was humbling, and challenging.

### **3.5.3 The second interview**

The second interview which took place 1-2 months post-graduation was intended as a shorter interview for keeping in touch and exploring experiences at the time of graduation. I had expected this to be a key time in the development of veterinary identity. However, I was mistaken, as the key stage - feeling like a vet - occurred later for almost all participants.

Thirty-three of the 36 original participants took part in the second round interviews. Before the second interview I re-read all of the transcripts and field notes from the first interview and started the interview with tailored questions to build rapport and connect to the previous interview. Key themes that had arisen following the first interview were explored, and through the interviews the theme of developing identity, and becoming a vet became more prominent. This was generated inductively through reading the transcripts of the first interviews.

For the rest of the interview I used a semi-structured topic guide, with three main areas: experience of graduation, looking for work, and health. Before commencing the interviews I checked that all participants had passed finals as I did not want to assume this. In this year the entire year group passed.

The topic guide was as follows:

1. First question: tailored to individual

Experience of graduation

2. How were finals?
3. Do you feel differently now that you have graduated? / How does it feel to have graduated? / How does it feel to be a vet?

Looking for work

4. Have you been looking for jobs?
5. When did you start looking?
6. What is influencing the first job that you apply for? / What aspects of a first job are most important to you?
7. What sort of support would you expect a first job to offer?
8. What sort of support would you want?

Health

9. How has your health been in the last few months? / Is your health influencing the jobs that you apply for?

I removed the question about how does it feel to be a vet after several participants told me they didn't feel like a vet and instead asked whether they felt like a vet. This deepened the exploration of veterinary identity and particularly the process of transition and of becoming.

### **3.5.4 The third interview**

For the third interview, before interviewing each participant again I re-read transcripts and field notes for that participant, and commenced the interview with personalised questions. Key themes from the first two interviews were incorporated into the topic guide. I adjusted how I talked about health, using "stress" more than mental health to mirror participants' language. The language used by participants around mental health is discussed further in Chapter 5.

The interview topic guide had six sections as follows:

#### Introductory questions

1. How have things been since we last spoke?
2. Are you working at the moment?
3. In the same job as before?

#### Experience of work

4. Can you tell me about a typical work day? What time do you start?
5. Do you feel you had enough support in your first job?
6. What do you enjoy most about work?
7. What are the most stressful aspects of your work?

#### Health

8. How has your health been since we last spoke?
9. Does work stress affect you?

#### Demands

10. What is the most challenging aspect of your work?
11. Do you have any control over the work you do?
12. Is there anyone who supports you at work?
13. How much freedom do you have over decisions about your work?
14. How do you feel about your workload?
15. To what extent are you able to use your skills and make decisions?

#### Future

16. Are you glad that you are working as a vet?
17. Would you study veterinary medicine again?
18. Would you recommend it to a friend?
19. Are you planning to change jobs?
20. How do you see your future career? / What do you see yourself doing?

By the time of the third round interviews I had tentatively first level coded the first and second interviews and created memos as part of a grounded theory approach to analysis. The third round interviews therefore provided an opportunity for theoretical sampling (Silverman, 2011 p70). During coding I had also become interested in whether Karasek's job-strain model of stress (Karasek, 1979) fitted and had relevance for the participants and so I used questions to explore this.

All third round interviews were conducted by phone. Twenty-seven of the original 36 participants took part. This included two of the three participants who had not taken part in the second round interviews so in total 35 of the 36 participants took part in at least two interviews in the study.

This raised some interesting issues. Participants had a degree of familiarity with me and a few participants requested to be my friend on Facebook. I hadn't disclosed information to myself about participants beyond that publicly available. Whilst I didn't use Facebook for recruitment for the study I was

mindful that I didn't want to treat participants differently to others from their year group cohort, several of whom had also requested to be my friend on social media. After some consideration I accepted all the requests but use the account in a professional way, without private details.

A further participant offered funding towards the study following the third round interviews, which I declined, but which was an interesting subversion of the power dynamic I had expected.

## **3.6 Talking about mental health**

### **3.6.1 Talking about mental health**

The dissonance between high profile professional concern and personal silence left a complex space to negotiate with young vets in this study.

Discussions with students at the information event for the study suggested mental health and wellbeing is a topic they feel strongly about, and wanted to discuss, but one where there were also fears around disclosure, surveillance, and personal impact or harm from talking about lived experience. There were institutional level concerns too. The initial response to the study from the institution echoed the dissonance in the profession: supportive, but also wanting to protect the students from the study, as they had been bereaved by the suicide of a classmate 2 years previously.

Within this context, using the broad definition of mental health and wellbeing discussed in the previous chapter, this study aimed to allow vet students and new graduate vets talk about mental health within the context of discussing their broader experience of living as a vet student and as a new graduate vet. This was to try to build rapport and trust, to understand mental health in the context of veterinary work and culture, and also to access information which quantitative studies with fixed interpretations of mental health may not have explored.

In trying to negotiate this space, several themes were generated from field notes and pre-interview interactions about the process of talking about

veterinary mental health. These were language, disclosure, surveillance, uncertainty, and stigma.

### 3.6.2 Language

The semi-structured topic guides for the interviews conducted during the veterinary course and following graduation had a single question about health:

“How has your health been while you have been studying?” (First Round)

“How has your health been since we last spoke?” (Second round)

Rarely did either question elicit details of mental health at first asking, despite the information materials, and explanatory talk for the study explaining that the research questions included exploring experiences of mental health. Accounts of physical health were the preferred first response for many, and given freely, yet talking about mental health required more encouragement or time for most students.

Accounts of wellbeing and mental health experiences and perceptions of mental health were instead often accessed via other questions in the study as they arose during discussion. Because of this, after the first few interviews, I added an exploration of mental health specifically, if participants did not include it in accounts of their health to the topic guide. However asking about “mental health” was complex. Sometimes just allowing space for the participant to talk, in recognition that it may have been a stigmatised topic, facilitated discussion.

Interviewer: How's your health been while you've been studying?

Participant: Yes, fine.

Interviewer: Yes? [pause]

Participant: Just stressful! That's it!

(Interview 7a)

The use of “stressful” here was the most common descriptor used by students for mental health concerns. As the interviewer trying to explore participants’ perceptions of mental health and wellbeing in the profession I tried not to impose a particular model of mental health and tried to use only language that they had to describe their experiences. After initial interviews it seemed many responded cautiously to questions about “mental health” but responded more openly to “stress”, “what has been hardest?” or invitations to talk about “the most difficult thing”, and gave accounts of their mental health when these were explored. For some, language of mental health diagnoses was avoided, and experiences externalised, with mental health experience discussed initially as being on medication, or attending counselling, but not describing internal experiences of the condition itself:

Interviewer: How’s your own health been when you’ve been at vet school?

Participant: I think with everything else that’s been going on, I have been on anti-depressants.

(Interview 17a)

Despite the context of the study, this participant and others referred to the use of medication instead of describing a condition or giving a diagnosis, however after further discussion later in the interview they referred to “my depression” and talked in more depth about their experiences, perhaps indicating an initial uncertainty about breaking the veterinary taboo around mental health and also a willingness to talk about it. Familiarity with drugs and treatments in a veterinary context and legitimacy of medical treatment may have made this less stigmatised, and felt a more accessible route for discussion.

### 3.6.3 Disclosure

In the third interview in the study, the student talked about suicidal thoughts and behaviour which they said that they had never spoken about with another person. I had anticipated that talking about mental health for the study may have been the first time for participants to discuss their mental health in a veterinary context, but I had not anticipated them feeling able to trust the study with experiences they had never shared before. Here, a student spoke about a day when they had been considering taking a quantity of prescribed tablets:

Interviewer: Do the vet school know about that? Is that something you talk to people about?

Participant: No. I don't really feel the need to tell anyone.

(Interview 3)

Following this I became acutely aware that for some participants, asking them to talk about mental health amounted to a significant disclosure. For others, they had discussed it with family or healthcare professionals but never in a veterinary context. None of the students talked about having been completely open about their mental health at vet school. Where disclosures had occurred, they had been cautious, and all had involved emotional work.

### 3.6.4 Surveillance

There is speculation that vets fear disclosing mental health concerns because of a fear of disciplinary action or sanction. There is concern that mental ill health may be seen to impair a vet's fitness to practice. In some circumstances, the RCVS, the professional regulator for vets in the UK, can sanction vets who experience ill health. This is detailed in Section 15 of the RCVS Guide to Professional Conduct (RCVS, 2013a). This concern also arose among the students in the first set of interviews in the study:



“When I first got diagnosed with the depression I didn’t want to admit... That was when I really thought that if the vet school found out, in my head I thought it might somehow make me not eligible to practice”

(Interview 26a)

The student expressing this concern felt uncertain about where the fear had come from, but explained it was a direct reason for them not wanting to talk about their mental health:

“I don’t know where I got that idea from but I thought if I tell the vet school they’re going to say I’m not fit to practice and I didn’t want to discuss it with the vet school or anyone in Edinburgh”

(Interview 26a)

There were also concerns about the motivation for the study being conducted. Before interviews started I reassured each participant about confidentiality of the study and said no data used would be identifiable to them, and several students asked further questions about this. From field notes, two of the participants asked whether I had chosen to study their year group because of the member of their class who had died by suicide two years previously. There were also questions about my role and position in the vet school, and whether I was involved in grading students. There were concerns both about being subjects, guinea pigs who might be being studied because of tragedy, and also about their mental health being surveilled and monitored by the vet school.

### **3.6.5 Uncertainty**

In a previous study of mental health in vet students at the same vet school I had found that while a quarter of vet students said they had experienced mental health problems, which is similar to the general population, half of vet students said that they did not know if they had experienced mental health problems (Allister, 2011). For a clinically orientated group this was surprising.

Possible reasons for this emerged in interview. Concerns around mental health and experiences involving mental ill health were common among those interviewed. Concern about stigma, directed to both self and others, was widespread, alongside a wide range of other concerns about seeking help, including attracting a diagnosis. These concerns are explored in Chapters 4 and 7.

### **3.6.6 Stigma**

Evidence of stigma emerged in this study. Its impact on mental health is examined in more detail later. It also proved a challenge for the study, and showed the level of risk students may have felt they were taking in disclosing to the study, and the trust they put in it. In an interview with a student who had lived experience of a mental health condition and who had experienced suicidal thoughts at vet school, they explained that they considered that mental health was not seen as having legitimacy as a reason for needing adjustments at vet school, such as time off for appointments:

“It’s really difficult to explain to someone how hard it is, you know, and for a long time I was embarrassed to tell anyone that I had problems, that I’d been diagnosed, because I thought well there’s basically me coming forward with an excuse”

(Interview 3)

The iterative approach to analysis throughout course of this study resulted in the development of my awareness of language issues, the magnitude of disclosure the study asked of participants, the effects of stigma, fears around surveillance, and personal uncertainty around mental health for the participants. These all proved important to the conduct of the interviews and the framing of the research with participants.

### **3.7 Analysis**

#### **3.7.1 Approach to analysis**

Analysis took place throughout the study from recruitment onwards, with field notes and memos. As the study progressed, identity became more prominent as a theme, but no existing theories about professional identity seemed to fit the contexts and experiences described by participants. Given the paucity of profession-specific evidence to support a theoretical framework for veterinary professional mental health, limited examination of support and almost no investigation of the development of veterinary professional identity, I chose not to use a prior theoretical framework.. Although theoretical frameworks have been proposed in other professions, adoption of a non-veterinary framework would have constrained and may have obscured the examination of factors which might be specific to the veterinary profession. Therefore, after consideration I chose a grounded theory approach to the analysis. As such I followed a process of first level coding, memo writing, theoretical sampling, and developing theories.

Recordings were transcribed either by the researcher or by a professional academic transcriber. Transcripts were then cleaned and checked by reading them while listening to the recording to confirm accuracy, particularly regarding acronyms and technical veterinary terms. Transcripts were then loaded into Nvivo 10 for analysis. For each round of interviews, a first order code list was generated from the topic guide. Transcripts were coded, followed by memo writing and analysis of first order codes. Second order codes were then generated from close transcript reading, keyword searches in the data and refinement of overlapping and interconnected codes. Data were then recoded using second order codes. Third order codes were generated from the second order code list and further analysis of interrelated and overlapping codes, relevant literature, and going back to the original data in a process of questioning and developing an understanding of my own positioning with the data and with a critical regard to my own original beliefs about neutrality and objectivity. This led to refinement of the codes, as did discussion with my supervisory team and discussion of the data. However

team coding was not performed. This would have been desirable for improving definitional clarity and as a reliability check (Miles et al. 2014) but was not possible with limitations of resource. The third order codes were used to generate themes which were explored in the third round interviews, codes from these and from the third order coding of the first and second interviews were used to develop a theory which was grounded in the data. The themes around support were analysed in the context of social support theory and literature on induction.

### **3.7.2 Transcription**

I transcribed five of the interviews myself and used a professional transcriber to transcribe the others. Following transcription I listened to each interview while reading the transcript, annotated them and made further field notes. I then entered the transcripts into NVivo10 (NVivo, 2014), which I used for recording codes and further notes. I was conscious that codes did not “emerge” but were chosen and prioritised by me. Although at first I made efforts to bracket my knowledge and experience, I became aware that this was not possible. Instead I tried to even-handedly intensively and then extensively analyse the data (Silverman 2011 p 62). When I felt I had identified a phenomenon through close reading and intensive analysis I then went to look at relevant features of the whole data set for extensive analysis to see if the phenomenon or theme I had identified was relevant elsewhere in the data. Because of the size of the data set, this was an immensely time consuming but useful exercise.

### **3.7.3 Transition**

Analysis of transition and the cohort aspect of this study involved sequential reading of the two or three sequential participant interviews as well as round-level analysis of first, second and third round interviews. Because of the size of the study, this was very time-consuming. It proved beyond the scope of this study to extensively analyse participant stories sequentially through the

interviews and to include this with the results. This is a future analysis I plan to undertake with these data.

### **3.7.4 Reflexivity and positionality**

During the analysis I kept a research diary which was vital for considering my position and my reflexive approach to the research process. I am aware that despite potential strengths of considering positionality, it does not alone explain researcher influence. Moser (2008) in discussing positionality suggests that her personality – social skills, emotional repertoire and how she interacted with her research participants – was more important in influencing how she was judged by them than the external meta-categories often discussed in positionality such as gender, ethnicity, or class. She goes on to argue that personality and positionality are conceptually linked, and that the extent to which personality is neglected in discussions of positionality imposes a limitation on positionality.

Although a crucial tool not only for understanding and considering my own subjectivity, and for ethical practice in conducting my interviews, the practice of reflexivity and positionality was challenging for me. As Mason (2002) discusses, the question of how we should be is not always easily resolved by making a decision and executing it. So although I may hope to position myself in a certain way, how I am actually positioned and the self which is presented is limited by my levels of instrumentality and self-control. How I actually am depends on the situation and the other participants, as Mason highlights (p73-74). My positionality needed to be meaningful to interviewees, facilitate interview flow, maintain focus in the interview, relate to their circumstances, and be sensitive to them in accordance with my ethical position and moral practice (Mason, 2002). Through the study I developed a better understanding of the importance of considering my positionality, and this is still a work in progress.

### **3.8 Summary**

In this chapter I have described the research design, aims, ethical considerations, positionality, and my approach to The Veterinary Transition Study. I have discussed recruitment and the sample, data collection, interviews, experiences of talking about mental health in the study, and the way I approached the analysis.

In the next chapter I examine results for the first aim of this study: exploring experiences and perceptions of mental health and wellbeing among veterinary students during the transition from study to employment.

## Chapter 4 Results - Experiences and perceptions of mental health and wellbeing during the transition from study to employment

### 4.1 Synopsis

This chapter focusses on the first aim of this study: to explore experiences and perceptions of mental health and wellbeing among veterinary students during the transition from study to employment.

This chapter is divided into four sections: participants' experiences of mental health and psychological distress, interaction of physical and mental health, influences on mental health, and mental health during the transition to practice.

### 4.2 Data analysis

Analysis of interview data from the two questions about health, from where mental health arose during other parts of the interview, and from field notes and memos, led to four descriptive themes relating to mental health being generated: mental health in transitions, experiences of psychological distress, the interaction of mental health and physical health, and mental health influences. From these themes, eight subthemes were developed. These are outlined in Table 4-1, and the themes are examined in turn through the rest of this chapter.

**Table 4-1 Summary of themes and subthemes on mental health**

Theme	Subtheme
Experiences of psychological distress	Mental ill health
	Suicidal thoughts and behaviour
	Interaction of mental health and other

	health conditions
Interaction of mental health and physical health	
Mental health influences	<p>Expectations</p> <p>Aspects of veterinary training and work</p> <p>Giving things up and obstacles to support</p> <p>Culture and beliefs about veterinary mental health</p> <p>Positive influences on mental health</p>
Mental health in transitions	

## 4.3 Experiences of psychological distress

### 4.3.1 Mental ill health, psychological distress, suicidal thoughts and suicide attempts

In the first round interviews in the study, 22 of the 36 participants discussed concerns about their mental health. Half of these (11) talked about stress and distress rather than a particular diagnosis. Eight participants talked about affective disorders, including depression, anxiety and seasonal affective disorder, or being on anti-depressants. Two participants said they had anorexia nervosa, and two people attention deficit hyperactivity disorder (ADHD). Several other participants described experience of mental health co-morbidity. Two students talked about experiences of suicidal thoughts and behaviour; both had at least one mental health condition.

In the third round interviews, performed 2 years after the initial interviews, and 19-27 months after graduation, there was deterioration in mental health for a number of the participants. Concerns about stress and mental ill health were experienced by most participants. The students who experienced the most severe difficulties with mental health at this stage were not the students



who had experienced the most severe mental health difficulties whilst at vet school. This finding was at first surprising but in the context of the participants' accounts of living with and coping with illness during veterinary training, became unsurprising. Participants who had experienced mental health problems or other significant adversity during their training seemed to make different choices about their first jobs following graduation, and acted to protect their mental health when required in practice. Conversely, if participants without this experience experienced significant adversity in practice - such as bullying, lack of social or clinical support- they were less well prepared, and suffered from greater consequences of this.

### 4.3.2 Suicidal thoughts and behaviour

In the first round interviews, performed when students were in their final year of vet school, several students described experiencing feelings of hopelessness:

“...it’s just it’s all coming down and there’s no light at the end of the tunnel”

(Interview 1a)

Two students described suicidal thoughts. Both described these occurring during the previous year, their final year at vet school. One of these students had attempted suicide during that year, and the other had come close to it, having planned the method they might use.

Neither student had disclosed their suicidal thoughts or behaviour to anyone at vet school. Even the student who had been hospitalised following an attempt on their life had done so during a holiday and had not missed time at vet school because of it. Both expressed a strong view that they did not want anyone at vet school to know about their suicidal thoughts and behaviour:

“I don’t really feel the need to tell anyone. [...] I wouldn’t really want to. [...] I don’t really feel they need to know”

(Interview 8a)

This reluctance to disclose their experiences seemed to be based on a number of factors. These included their views about themselves, with one saying that they were not the “type” of person to seek help or talk about their problems:

“I’m more of the stoic suffer in silence-type. I’m not into that kind of thing”

(Interview 3a)

Self and public stigma towards suicide and help-seeking were also reported. One student described their suicidal thoughts as stupid:

“I think it was just realising that [I’ve] thought something incredibly stupid”

(Interview 3a)

When asked if they had told anyone about their suicide thoughts or attempt, in explaining that no one at the vet school had known about it, the student who had attempted suicide compared disclosure to broadcast:

“I don’t feel the need, that I need to broadcast it around or tell them”

(Interview 8a)

This suggests a level of stigma in help-seeking: it was seen as an extreme act to tell anyone, amounting to a public broadcast. There was a fear of everyone knowing, a sense that asking for help was attention-seeking, and that suicidal experiences were to be kept quiet.

Both students who had experienced suicidal thoughts expressed a sense of pessimism that anything could help:

“It’s just, what are they going to do about it? What \*can\* they do?” [\*emphasis in tone\*]

(Interview 8a)

There was a sense of passivity. One participant suggested that by not telling anyone they were not concealing their suicide attempt, but that someone would need to ask them before they disclosed it:

“It’s not that I wouldn’t, if they asked I’d tell them”

(Interview 8a)

In contrast to this passivity, the student expressed a somewhat conflicting view: that they alone were responsible for “sorting out” their suicidal thoughts:

“It’s not something for them to sort it out, it’s something for me to do”

(Interview 8a)

This sense of self-reliance, even in extremis, was developed as a theme and is explored further in Chapter 6 in relation to veterinary professional identity.

Both students also described emotional work in protecting others from their feelings. Both students were aware of a formal in-university peer support scheme as well as less formal peer support, but neither had accessed these:

“They’re not trained to deal with things that people like me would be approaching them with [...] I know for a fact that this is just the tip of the iceberg for me. If I went to people with some of the problems I’ve got, I don’t think they’d know what to do with themselves, you know! I think it’d break a few of them!”

(Interview 3a)

There was also concern for the wellbeing of the peer supporters:

“They’ve got severe problems of their own and you just think ‘why are you putting yourself in a position for me to dump my problems on you?’ [...] I’ve never been a big fan of, I’m not a big fan of sharing it is halving it. I just think ‘no, because I’m just putting that grief on you and you don’t need that either’”

(Interview 3a)

One of the students who had experienced suicidal thoughts raised their experience of bereavement by suicide of their classmate whilst at university, and linked this to stigma and difficulty accessing help. They related this to their own experience of not fitting in at vet school, and having experienced behaviour from other students and clinicians which they found oppressive:

“Because even in lower down, even in high school and whatnot, if you’ve got something that’s different from everyone else, you tend to get squashed quickly. [..] You learn to shut up and get on with it! And those that don’t get on with it, you know, it eats them alive and then they do stupid things, you know. We’ve had a couple of suicides in the time that we’ve been here and you just think ‘were they the people that couldn’t be quiet anymore but they had no-one to turn to?’”

(Interview 3a)

“Being a vet” had an influence on suicidal thoughts and behaviour, and this occurred through a number of routes. One student talked about being “driven” to suicidal thoughts:

“It was more a shock to realise that I could be driven to having those kinds of thoughts, and it was driven, you know”

(Interview 3a)

When asked what it was that drove them, the student directly attributed this to the veterinary course, including the volume of work, and exhaustion:

“Just the course. Just flat out, worked my arse off for however many years and then I just had nothing more to give”

(Interview 3a)

Specific pressures mentioned by the student leading up to the near-attempt on their life included just having received a low (fail) mark in a multiple choice exam at the end of a placement, and having recently completed 2 weeks of long-hours work involving nights in the small animal intensive care unit. This

student said that they had only experienced suicidal thoughts once, although they did have a plan and the means to end their life - by overdose of tablets which they kept in their bathroom.

Both students experienced their suicidal thoughts and behaviour during the final year of veterinary training at university. One said they had never experienced them before. The other student who had both suicidal thoughts and a suicide attempt said they had experienced these thoughts previously while at vet school. Although this student did talk about influences other than vet school on suicidal thoughts and behaviour, including having had an eating disorder as a child, they felt that vet school was the “reason” for their attempt:

“But I do think vet school was like the reason. [...] That’s pushed me to sort of the edge. Being away from home, being stressed and... It’s more being away from home I think. [...] And being on my own in a city, which [sic] I live on a farm at home, it’s not the same at all [...] So I think if I hadn’t come to uni then it wouldn’t have happened at all”

(Interview 8a)

Aspects of veterinary school given as direct contributors to the suicidal experiences included stress, exam failure, volume of work, clinical placements and night work, being away from home, and differences in city life to home life.. One student who attempted suicide raised experiences of mental ill health as a factor. Both students were on psychiatric medication at the time of their attempt or worst suicidal thought.

As well as aspects of the veterinary course and veterinary work contributing to suicidal thoughts, there was also a sense among the students that “being a vet” could lead to suicidal thoughts or suicide. The student who attempted to end their life described their attempt as almost a collateral cost of studying veterinary medicine:

“But then if I hadn’t come to uni I wouldn’t be a vet. So it’s like it’s something I’m willing to... if this is what it takes to be a vet then fine, you know”

(Interview 8a)

When asked if they felt they were sacrificing their health for pursuing their veterinary study the student felt that they were, and even suggested that if suicide risk was an inevitable consequence of veterinary study, then they would accept that. That under no circumstances, even the risk of death, would they give it up:

“Either I get out at the end of it or I don’t, you know.  
Whatever, I won’t give up, vet school anyway”

(Interview 8a)

When asked if they would continue with vet school whatever it did, the student suggested that suicide risk was a known cost of veterinary study, and that they accepted this:

“Yes, that’s what it does, that’s what vet school does,  
so...”

(Interview 8a)

This inflexibility of thinking is consistent with findings of previous studies: that vets who have attempted suicide have felt that they wanted to leave the profession but did not feel they have other options, and that this sense of being trapped contributed to suicidal thoughts . It is also consistent with many participants’ strong motivations to study veterinary medicine and considering no alternative suitable:

“It’s like if I’m not a vet, what do I do? And if this is what  
it takes to be a vet then that’s what it takes”

(Interview 8a)

This idea of necessary loss was a more extreme version of a common account among other participants of having to give up things that they loved in order to be a vet. Other students who did not experience suicidal thoughts gave explanations for the association between veterinary mental health and suicide which involved an inevitability of psychological risk and harm, and

necessary loss or necessary encounter with risk. They also expressed strong motivations for veterinary study; a majority said that they would not even consider an alternative career. This rigid thinking and strong identification with veterinary medicine as the only career, and the link with potential harms and consequences for mental health is explored more fully in Chapter 6 in the context of veterinary identity.

When talking about their own experiences of suicidal thoughts and behaviour or their views of suicide, some participants used language similar to that which vets use around the euthanasia of animals. To “put to sleep” is a common euphemism for animal euthanasia in the UK. One of the students who had thoughts of ending their life by suicide with an overdose of tablets, said:

“I just couldn’t take any more and I thought if I take an extra few pills is that going to put me to sleep? [...] oh well it may put you to sleep but it may put you to sleep permanently”

(Interview 3a)

This idea of death as part of veterinary culture is explored further in Chapter 7.

In contrast to suicide being something to hide, and “stupid”, there was a suggestion that suicide required courage. The student who attempted suicide said:

“I’d thought about it before, I’d just never had the guts to do anything about it”

(Interview 8a)

The two students’ accounts of their suicidal experiences during their final year of veterinary study at university were quite different: one experienced suicidal thoughts quite suddenly on one occasion and was shocked and scared by these, while the other who attempted suicide had experienced these for some time:

“But it had been coming, I think, for quite a long time  
[...] and then when it got to November I thought ‘sod it’  
[and attempted suicide]”

(Interview 8a)

The student who had a plan but did not attempt described their own process of de-escalation as they moved away from the plan to attempt. This had involved phoning a tutor at the university, the tutor realising from their voice that they were unwell, and supporting them to take a break from university. The student reported this as helpful and protective.

No participants reported suicidal thoughts or behaviour at the second round interviews shortly after transition to practice. Even students who had previously expressed hopelessness about their future were more psychologically buoyant in their outlook at this stage, although some expressed concerns about the future. Almost all expressed a pessimism regarding their psychological wellbeing during the first few years in practice, reflecting a sense of inevitability around poor wellbeing and exposure to risk. There was a shared expectation among many participants that they would have “no life” for their first 2 years in practice. This is explored further in Chapter 6.

In the third round interviews, 19-27 months after graduation, mental health concerns were increasingly prominent for many participants, including those who had not experienced mental health concerns previously. One participant described suicidal thoughts and behaviour, and a number described feelings of hopelessness and entrapment. The participant who described suicidal thoughts and behaviour did not have a history of mental ill health, and had not been concerned about their mental health during the previous two interviews. They attributed their suicidal thoughts and behaviour directly to situations at work, and the method they started to use in their attempt was a veterinary specific means – an equine euthanasia drug.

“And I found myself thinking, I’ve got a catheter and  
Somulose [an injectable drug used to euthanase  
horses], and... I didn’t see any way out.”



(Interview 6c)

Talking about what led up to that night, the participant talked about increasing pressure at work, including long hours and interpersonal issues, combined with decreasing confidence and social isolation. They described struggling with their own and their practice's expectations regarding their professional identity, not being the "type" of vet they wanted to be, or the same "type" of vet as others they were working with. The participant also talked about what they had given up to meet the demands of veterinary work and a sense that there was nothing else left in their life - a description of personal and professional identity as inseparable:

"It was just the lowest point that I've definitely had in my life. After my first month there I'd had a weekend on call and I was exhausted and I had to go in on Monday morning for a meeting, just to tell me that I was crap at everything [...] That night I went home and just had a full on breakdown. Which I'd never had before... [...] It was a culmination of being tired and then the only thing in your life being your work because you've given up absolutely everything else. And then to be told you're crap at it was just overwhelming. [...] I took a bottle of Somulose and a giving set home and thought, 'that's it.'"

(Interview 6c)

### 4.3.3 Stress

Although few participants volunteered experiences initially when asked about mental health, when the subject was approached using different language, experiences were more readily volunteered. "Stress" was a word the students particularly seemed to identify with, more so than "mental health". During the first round interviews, 11 participants talked about stress affecting them. The experience of stress was described as feeling irritable, tearful, physically agitated, low in mood, short tempered, tired, less able to concentrate or work effectively, physically unwell, eating more or less than usual, compulsive behaviours, and sleeping more or being unable to sleep.

One student who said they experienced stress talked about taking medication to help them sleep. Two others talked about the impact of stress primarily being on their sleep, and constant tiredness during the day. Both attributed this to the pressures of vet school study:

“I get very tired. Really tired. And that does crop up every now and again. [...] And I get quite teary and raw”

(Interview 5a)

All participants who experienced stress attributed it to aspects of veterinary study and training. Several participants talked about the impact of the geographical isolation of the veterinary school from the rest of the university, and of mixing primarily with other veterinary students. In one interview, the student spoke about how the transition from second to third year had been difficult:

“I think you had to definitely change the way that you studied because it became more of a memory game for me, rather than learning why something does it. It was more you have to learn these numbers, there’s no other way of doing it. [...] It’s just a lot all at once”

(Interview 14a)

They went on to explain how this volume of learning had caused stress:

“I think I just got more stressed. And also we all moved out here, and I feel that *\*is\** [emphasis in tone] an added stress”

(Interview 14a)

The student went on to talk about the impact on her mood, temper and irritability, how she had warned others against applying to vet school, and how the travelling time to the geographically isolated campus and the volume of study affected her, compared to students she lived with who were not vets. Other students described factors contributing to stress including the pressure to socialise, particularly around alcohol, and the volume of work:

“A feeling of there’s so much to learn and not enough time”

(Interview 28a),

Stress was linked to clinical cases with decision making, potential for unintended harm, competence-responsibility mismatch, life and death responsibility, and fear or failure or mistakes all contributing. This theme grew in importance following the transition to practice in the third round interviews:

“In this year it’s I think you have additional stress because you feel a bit more responsible for the cases and things, and it’s, you know, did I do that the right way, should I have done it this way, and second-guessing yourself I guess”

(Interview 28a)

Also contributing to stress were ethical conflicts, and unpredictable or long hours. Exams were identified as a cause of stress, especially resit exams which separated participants from family supports during holidays, as were night duties and lack of holiday time due to requirements for completing placements. Pressure from self and others was discussed by a number of participants, in all three rounds of interviews at each stage of transition. This included fear of mistakes and worrying about letting themselves and others down. Many students spoke of giving up important aspects of personal and family life for veterinary medicine.

Many vet schools are located away from central university sites to accommodate equine and farm animal facilities. The impact of this geographic isolation and spending time primarily with other vet students had an impact on participants’ socialisation and acculturation at university:

“You’re kind of stuck out in a building which doesn’t have anything else around it”

(Interview 14a)

The impact of this geographical isolation from non-veterinary students while studying is addressed in more detail later.

Stigma was not limited to mental health diagnosis, stress was also stigmatised. There was evidence of self-stigma and public stigma around stress in participant accounts. A number of students referred to others being “stressy” or “flaky” if they exhibited signs of stress or mental ill health. Being stressy or flaky was considered undesirable, and to negatively affect others around the person. One student, who felt they had gone from being perceived as relaxed to “stressy” during their time at vet school, talked about an encounter with their older student buddy-mentors:

Participant: They named us all. I can’t remember what my original name was. But anyway my flatmate used to be called stressy [...] But then, like since third year I’ve been like known as the stressy one.

Interviewer: How did it feel, being kind of known as the stressed one?

Participant: It would get me down sometimes, but, like again I recognise it for who I am, so...

(Interview 16a)

The student explained they would rather not be labelled as “stressy”, and that although all students described working hard, there was also a stigma to work being difficult and effortful:

“I think it’s negative to be seen to stress about how much work you have when everyone else doesn’t stress and everyone else passes”

(Interview 16a)

When talking about stress, being “stressy” or easily stressed was attributed to personality and as a fixed characteristic by a number of participants:

“I’m a very stressy person when it comes to exams and stuff and like I guess a type-A personality, as a lot of people are in vet school, and yes, it makes things really

tough on myself and I know I don't need to do that but I guess that's just how I am"

(Interview 27a)

The perception that mental ill health arises due to fixed features of personality or character, a perception of an external locus of control, and stress or mental ill health as deterministic and inevitable are discussed in Chapter 6 in the context of stress within veterinary identity. As well as stress being a product of personality, a number of participants described it as being an inevitable part of vet school:

"I'd say, I mean the stress that comes with vet school has a negative effect"

(Interview 28a)

Another factor commonly associated with stress by the students was pressure of family expectations, both self and external. A number of students talked about pressure, with several mentioning the impact of costs to their family, both for the cost of their study and the costs of travel to their approaching graduation:

"Well for me I think it's more pressure than anything else. Like my parents don't pressure me but I feel pressure to, I don't want to say 'impress', but just to make them happy and make them know that their money isn't going to waste and everything [...] there's a lot of people back home that are, you know, waiting for me to come back and everything and people are saying 'oh I'll come to your graduation', so it's a bit of pressure, I think I put on myself a lot. And a lot of people tell me 'don't do that', but I just can't help it, I just want to make people happy back home [...] I guess it just adds extra stress"

(Interview 27a)

In the second round interviews with participants shortly after graduation, stress was the only mental health condition that had worsened between the two interviews during finals, graduation, and starting out in work. This had

only occurred for a few of the participants; most participants during the second round interviews reported less distress than at the time of the first or third round interviews. Two participants who had experienced stress whilst at vet school talked in the second round interviews about continued stress during and after exams, including panic. Some of this was attributed to the pressure of final exams, but also to a feeling of concern that they were not ready to start work:

“There were times of emotional stress and panic [...] it was a two-pronged thing – one was first of all the exams, and just feeling that, as I was saying, being feeling unprepared and not ready to take that step. And the other was somewhat after exams had finished and also at the time I was studying for exams it was even if I get past these exams, do I feel ready to work in practice?

(Interview 28b)

When talking about what was most stressful in their first job, particular concerns were euthanasia and communication with clients and animals, as well as skill based concerns:

“I feel a bit we kind of glossed over some of the more difficult topics that you sometimes have to discuss with clients about euthanasia and money are kind of two that are most difficult, so... [...] it was both the practical skills and being able to talk to clients about those particular difficult topics as well”

(Interview 28b)

Another participant in the second round interviews discussed being very tired in their first job, and said this was due to staying awake at night thinking about their work:

“I sort of struggle at nights switching off because I think ‘oh I’ve not done that, oh I’ll have to go out and do that..”

(Interview 33b)

As already highlighted, participants who had experienced poor mental health while at vet school often did well in practice. Following individuals who had experienced severe mental health concerns at vet school, factors that seemed to be protective for future health were moving back home close to friends and family, prioritising work-life balance and wellbeing when choosing veterinary jobs, and an insight into their own individual needs for wellbeing. One participant who had struggled with mental ill health and a suicide attempt at vet school described how their mental health had improved during the time they had been in practice, and what they attributed this to:

Interviewer: Do you find that work affects your health?

Participant: Yes. I've got a lot better recently, sort of mental-wise. But I think that's maybe because I've changed the way I'm doing it. If I was still doing my full-time vetting whatever, god knows where I'd be right now.

(Interview 8c)

They went on to describe how their previous experience of mental ill health and awareness of this had led to a decision to work part-time as a vet and part-time in a non-veterinary role, and to specialise in the field in which they felt most confident in their work as a vet:

"I have had a lot of mental health issues in uni and when I got out as well. So I think actually taking a step back from being mixed practice or whatever, helped me massively. I wouldn't like to think where I'd be if I was still doing it."

(Interview 8c)

The participants who struggled the most with their mental health at the time of the third round interviews were people who had not experienced severe mental ill health previously. One participant who attempted suicide stated that they felt they had a breakdown because of pressures in practice, but had never experienced mental ill health before:

“I’d never been depressed before that night.”

(Interview 6c)

Stress in practice was extremely common among participants and described almost in terms of inevitability. There were, however, individuals who felt generally contented and happy despite stresses. This was attributed to meaning in work, support at work, and activities outside work enabling some balance. This is explored further in chapter 5 in the context of themes around support.

Once in practice, seeking mental health help was less common than whilst at vet school. This was partly attributed to access and difficulty taking time away from work, but also concerns about the implications which having a mental health diagnosis on medical records might have for professional careers.

In the third round interviews mental health concerns were discussed largely in terms of stress, or linked to experience of situational factors, rather than in terms of mental health conditions as in earlier interviews. A number of participants described having “breakdowns” or “nervous breakdowns”, and directly attributed these to veterinary work and situations and pressures in their workplaces, but did not align these experiences with particular mental health diagnoses. This escalation in situational factors attributed to a decline in mental health was accompanied by participants who had not previously experienced mental health conditions describing extreme stress. This raises concerns about the level of stress that was common for new graduates and its impact on mental health, which is discussed further in Chapter 7.

Participants’ responses to these experiences had not been to seek mental health help, but instead was often to leave their jobs and seek alternative types of veterinary work, or remain in the job and view the stress and subsequent impacts as an inevitability of early career veterinary work. One participant described a situation where their job had changed from being a well-supported “intern”, to having to manage the practice, including staff with performance concerns, and to perform accounting and management tasks



they were untrained for. They described a “constant state of worry” (Interview 5c) and how the situation developed from them “enjoying the challenge” to feeling devalued, stressed, and a “breakdown”. They talked about how their work affected their personal life and led to them feeling overwhelmed in social situations:

“It was really tough. [...] It was really hard, and I got to the point where I was coming home late of an evening because I’d been doing lots of extra work [...] I was getting really ratty with my other half, which isn’t me, I’m fairly laid back. We were going to a friend’s barbecue one Saturday and I didn’t want to get in the car, I just wanted to go and hide. And we got to my in-laws and I just burst into tears.”

(Interview 5c)

They also described physical impacts, and how the situation worsened:

“It got to the point where I didn’t want to leave the house [...] I wasn’t sleeping very well, and I thought, you know, ‘stuff it.’”

(Interview 5c)

Following this incident the participant described deciding to move to a different type of veterinary work, in a different part of the world, because of the impact their work was having on their mental health.

This change from discussing mental health in terms of diagnoses to discussing the impact on them as individuals and how they coped may be related to not having sought treatment or diagnosis for symptoms experienced, may be related to stigma about mental health diagnoses, and may possibly also be related to a sense of inevitability about the impact of early career veterinary work on mental health. It may also have related to familiarity with me as an interviewer: having spoken before and feeling that to some degree they were known to me as a person, that they could talk in depth about experience rather than classify themselves by diagnostic criteria.

Experiences related to stress in clinical practice and the impacts on mental health included stress, difficulty sleeping, anxiety about cases, anxiety about work, social withdrawal, lack of confidence, loss of self-esteem, and feelings of entrapment and hopelessness. Some participants who described these experiences did not relate these to their health but saw them as an inevitable part of work. One participant who said that their health was “fine”, described work as “tough”, “exhausting”, “draining” and said that they were “knackered”:

“I think how mentally exhausting it was, I wasn’t prepared for, like how emotionally draining it can be. Like the fact that you’re crying your eyes out one minute when you’ve put an animal to sleep, and the next minute you’ve got to be happy [...] And physically exhausting. Like long hours and things [...] it’s when you get back home and you feel drained because you can’t do anything else.”

(Interview 9c)

In contrast, some individuals had positive experiences of the impact of work on their health. One participant described their surprise at how “positive” and “good” their experiences in practice had been:

“When I qualified, you know, because it’s all the how often things don’t go to plan or how often graduates are left without support, I always used to expect ‘OK, well I’m going to have to, it’s going to be...’. And I did think ‘oh it’s going to be horrendous but it will hopefully be worth it in the long run’. Actually it’s not been horrendous at all.”

(Interview 33c)

When individual participants’ first, second and third round interviews were analysed sequentially, this mixed impact of work on health seemed to be more due to situational factors than due to previous experiences of mental ill health. Individuals experiencing mental health difficulties at university could go on to experience better mental health in practice in the right conditions, and individuals who had experienced good mental health at university could go on to suffer mental health difficulties in practice. The influences on this

phenomenon seemed to be largely contextual and related to working conditions, environment and both instrumental and emotional supports.

#### 4.3.4 Affective disorders

In the first round interviews, performed during the final year of veterinary study, eight students said that they had been diagnosed with depression or were taking antidepressant medication. Depression was often introduced to the conversation by the student in terms of medication or treatment and diagnosis. This medical interpretation was in some ways unsurprising from a clinical cohort of students. Yet despite using this framework, in discussion participants varied in their explanations, with several expressing uncertainty about medical models of mental ill health:

“I don’t think mental health is very well understood and I don’t know if I believe this whole serotonin theory, because from my understanding of science [...] no-one really understands if it’s serotonin at all or if it’s something else”

(Interview 21a)

Participants described their experience of depression as low mood, sleep problems, social withdrawal, not wanting to get out of bed, crying, anger, feeling numb, arguing with family, self-criticism, suicidal feelings and hopelessness:

“[It is] depression I’m sure, it just negatively affects your mood, everything... there are just no positives anymore. Especially in the preclinical years it was just dire [...], there was just nothing I enjoyed about coming to school every day, it’s just unhappiness [...] I had a couple weeks where I’d just go home and cry”

(Interview 1a)

Three of the eight with experience of depression said their depression had started before vet school: two during teenage years and one at twenty years of age. The other five students described depression starting during their

time at vet school: two said it had started during first year, one during second year, one during third year, and the other not saying when it had started. The first three years of the course are traditionally the pre-clinical part of the veterinary course in most UK vet schools and the final two are clinical teaching and placements. Traditionally some in veterinary education have considered the final two years to be the most difficult parts of the course, so it is notable that none of the participants felt this was the time their experiences of depression had started.

Four of those who had experienced depression described experiences with treatment, and four had not sought ongoing treatment. Of those who sought treatment, all described challenges in accessing care and balancing treatment with university studies. This was due to self and public stigma, availability of services, exclusion criteria operated by those services, and time and location constraints.

Experiences of treatment included hospital, outpatient secondary psychiatric care, primary care, and university support services. One person with depression had been hospitalised with a concurrent eating disorder and had received outpatient specialist National Health Service (NHS) care. One had sought counselling from the university but had been turned away, and had then sought treatment from the community mental health team (CMHT). Two others had received antidepressant medication from their general practitioner (GP).

Of the three who described experiences with psychiatric medication, one stopped taking them because they felt the side effects of medication impaired their school work:

“I was on like six different ones, never found the SSRIs helped and I always found that the side effects of being just like sleepy and whatever were almost more difficult for me to keep up with my school work than not being on them”

(Interview 21a)

Being at vet school also affected students' management of their health: the other two students with experience of medication were feeling less depressed at the time of interview but were wary about stopping medication in case it affected their study:

"It has been hard, but I do think I'm finding better ways of coping for it. And right now, with regards to my depression and like the medication I'm on, I'm kind of just staying on it through final year because I was afraid of, like because I have discussed with my doctor, like I really want to start like, you know, managing it without medication but the fear of stopping it and then hitting a low at this point is just, you know, would be so difficult"

(Interview 17a),

One participant was concerned stopping medication would have an impact on their exams:

"I'm not going to mess anything up for finals, I'm just going to stay on it until I'm in a steadier place. [...] because I don't think I need to be on it forever. But I think it's difficult to come off medication when you're in such a stressful environment because you're meant to come off when there's no stresses and I was like 'well I've always got stresses!'"

(Interview 21a)

They had also received medical and family advice to this effect:

"So eventually my dad and my doctor just said 'just stay on it while you've still got all the stress of exams and later when you're settled and things are more stable then think about it then'"

(Interview 21a)

Experiences of non-pharmacological treatment for depression were mixed. The student who had received specialist care felt it had been helpful, but the student who had approached the university counselling service and the CMHT had a less positive experience. They described finding the university counselling service "disappointing and unhelpful", and being told that their

depression was too serious for the counselling service to support. The student talked about being given a list of phone numbers of non-university services and being told to go to their GP. They described how even then, the phone numbers they had been given did not lead to help. The counselling service not responding as the student had hoped, also affected the way they felt:

“At the time you kind of feel like crap and you kind of feel like you’re very unimportant and very small and your problems are so insignificant that they’re not worth helping”

(Interview 21a)

The student said that this disappointment also affected subsequent health behaviours as they felt less likely to seek help:

“Then for you to go and actually take the courage to ask them for help and they basically say that ‘we can’t help you’. You feel like, OK you’ve tried and it didn’t work so you’re not going to try any more”

(Interview 21a)

The influence of early experiences of help-seeking on future health behaviour was common among participants who had tried to seek help for their mental health. This highlights a missed potential opportunity for intervention and support, in initial response and in messaging to students about help available.

All eight students who had experienced depression related their mental health to their experiences at veterinary school. Each attributed some component of veterinary study and training as either causing or exacerbating mental ill health. These factors included various pressures: pressure to socialise, pressure and expectation to be happy, parental expectation and pressure, and pressure of exams. They also identified volume of work, stress, lack of time and impact on things that they perceived would usually help improve mental health including exercise and nutrition. Other factors

students felt had exacerbated their depression were taking the contraceptive pill, the death of a parent, and hospitalisation for an eating disorder.

In the second round interviews, none of the participants who had talked about depression in the first round interviews reported worsening depression, and no other participants reported having developed depression. This was interesting from a transition perspective: although major potential stressors had occurred, including final exams, many moving away from their university city, financial pressures and trying to find a job, those seemed to have been counterbalanced by relief and even joy at completing their veterinary degree. It suggests that the mental health difficulties experienced by new graduate vets may be precipitated more by features of practice and work than by final exams, early financial pressures, and moving to a new area.

#### **4.3.5 Eating disorders**

Two students had experienced eating disorders in the form of anorexia nervosa. For both, the anorexia had commenced before the start of veterinary training. One of the students said their anorexia had started at age 14. The other had been in hospital with anorexia in their final year of high school, and had been discharged from treatment the day before they came to university. Both had received hospital treatment for anorexia, though only one had ongoing treatment while at university. Both students had experienced anorexia through their time at university, and attributed anorexia to pressure of exams initially at school and later at university, and a need to feel in control:

“I think my final year at school I dealt with the stress of finals by taking control. I couldn’t take control of the exams so I took control of other things”

(Interview 13a)

Both students described a complex relationship between their eating disorder and veterinary study and training. Both felt that veterinary study had in some ways helped them to cope with their eating disorder or motivated them to

seek treatment. One described how it was partly the prospect of having to delay her attendance at vet school that prompted her to seek help:

“I think there were two kind of turning moments – one was when my hair fell out, and then one was when I wasn’t going to come to uni. And that was kind of when I was like ‘this is actually a bad thing’, if you see what I mean?”

(Interview 13a)

Once at university, staying at vet school had also become a motivation to try to address the anorexia:

“And then I came here and there was kind of talk amongst my doctors and stuff about maybe I wasn’t well enough to continue, and I think that was kind of at least the initial motivation for being like ‘I need to get this sorted and under control’. [...] there’s motivation here, like there’s a reason to... Like the end goal...”

(Interview 13a)

Vet school was described both as a motivation to get well and stay well, and as providing a distraction from symptoms and thoughts. However, at the same time, both students also felt that veterinary study had contributed to their symptoms. One felt she had needed anorexia to get her through vet school, that it helped with exam study and performance:

“I think what always makes it worse is exams and stress like that, I kind of think that my eating disorder will help me get good results. If I do this it will be better, results-wise [...] it’s got me through vet school, it’s got me the grades that I’ve got, so...”

(Interview 8a)

This participant went on to describe anorexia as a way to cope with the stresses and rigours of vet school:

“I use it as like a coping mechanism. [...] which I know is not healthy, but to me I kind of think it got me through



vet school. [...] I still think that now. I know it's the wrong thing to do but it got me through it, so you know"

(Interview 8a)

Both students felt it was more possible to engage in restrictive eating patterns at university than it had been at home. They also both felt that being away contributed to isolation from family and friends who were their primary supports, added to stress, which contributed to their symptoms:

"If I feel that I can't cope with anything else, which is usually being away from home, which is when I'm [away at vet school] because I'm on my own [...] I've got these extra stresses from being at the vet school, like the exams and the workload, it's like it's much easier for it to creep in"

(Interview 8a)

One student described the eating disorder as though it was integral to her becoming a vet, and that this was a cost she was prepared to accept:

"So whatever happened it made me a vet, so if that what it takes again, then that's what it takes"

(Interview 8a)

Neither student had wanted the vet school or their friends at university to know about their eating disorder, and had tried to limit who knew about it. Anorexia had limited their participation in vet school life. There had been physical constraints, such as feeling very cold on outdoor placements, and difficulty engaging in social activities because they were centred around food and alcohol:

"It did kind of affect my university experience in that I didn't join any sports clubs because obviously I was very.. Like not able to do sports. And I didn't really do any of the freshers week drinking kind of things and, like still kind of won't go out..."

(Interview 13a)

One of the students felt that the high proportion of women at vet school had contributed to the pressure to monitor calorie intake and weight, and that this had been unhelpful for her. She talked about a custom of bringing in cakes on a Friday:

Participant: Well I knew about the Cake Fridays but I didn't think it would be as hard as it was. And especially because everyone goes on about how they lose weight in final year or gain weight in final year, and you're just kind of like 'oh god, shut up'.

Interviewer: Do you think about weight loss and weight gain?

Participant: Yes. When you have a bunch of women together you can't really... It's not surprising.

(Interview 13a)

One of the students described how they had been prevented from becoming a mental health peer supporter at university because of their eating disorder. They perceived that not eating at the meetings for the supporters led to them being singled out and selected as not appropriate for the role:

"I tried to join peer support and there was a lot of food and it kind of, it wasn't a problem for me at the time [...] It was genuine concern, which was the worst thing, because it was coming from a good place but at the same time it was like all this, 'I appreciate that they think that I'm maybe not coping but this is me coping as best as I can [...] but it was decided that I wasn't in a good enough place to be able to help people'"

(Interview 8a)

The transition to practice affected eating patterns for a number of study participants. One participant with a history of eating disorder talked about having only had a lunchbreak three times in 3 weeks in their first job in practice. Other participants talked about being too tired to eat after work, or eating food that they felt was not nutritionally balanced.

### **4.3.6 Attention deficit hyperactivity disorder**

Two students described having ADHD. For both of them this had started before vet school and they had previously received treatment but struggled to get treatment whilst at vet school. One considered ADHD a learning disability and the other considered it to be a mental health condition.

Both took psychotropic medication and reported difficulty balancing seeking psychiatric help with their studies, including the inflexibility of NHS specialist appointments and the long hours on the veterinary course. One described having to wait 3.5 years for a specialist referral whilst at vet school. One had found it “stressful” missing lectures to go to appointments, and said this had been most difficult during the final clinical year of training. One of the students who had ADHD described having a concurrent developmental disability and described feeling that they did not fit in with other students and were conflict with other students and staff whom they felt did not understand them.

## **4.4 Interaction of mental health and physical health**

The interaction of physical health and mental health was identified as a theme during analysis of interview data. The relationship between mental and physical health was two-way. Some participants directly identified stress or mental ill health as having an impact on physical health conditions. Others talked about the impact on their mental health of physical symptoms or injury. This was more common in the second round interviews with new graduate vets, where physical health risks – especially in the course of work – became more prominent as experiences and concerns.

When talking about mental health, some participants seemed to find it easier to begin by talking about physical symptoms of mental ill health, such as tiredness, weight gain or weight loss, perhaps due to the challenge of talking about mental health in a stigma-laden veterinary context.

Physical health problems attributed to mental ill health were varied. Stress was usually described as the cause, although a few participants talked about

the physical effects of depression and anorexia. Physical health consequences attributed to stress and other mental ill health also included hypertension, which the student attributed to stress relating to exams, and psoriasis:

“The university health service is constantly worried about the chronic high blood pressure, but they always take it just before exams!”

(Interview 30a)

“Psoriasis shows up more, just reactions from stress”

(Interview 1a)

Eczema, vulnerability to infection, irritable bowel disease, dehydration and collapse leading to unconsciousness were also discussed as sequelae from stress. The student who collapsed attributed this to pressure of work on a lambing placement where they had worked extremely long hours. Participants also described a zoonotic infection caught while lambing, weight gain, and weight loss, which again were attributed at least in part to stress:

“I lost a lot of weight in 3rd year [...] just with like the stress, the acute stress I think”

(Interview 23a);

Participants also talked about respiratory infections and pneumonia, attributed to poor housing at university, and the persistence of which one student attributed to stress and to not being able to seek treatment due to the hours demanded on clinics. Other conditions attributed to stress included musculoskeletal disorders, back pain, cystitis, colds and viral infections, a number of students saying vet school stress made them more susceptible to these. One participant described worsening of seizures, which they attributed to lack of sleep on an intensive care placement at university. A number of participants discussed fatigue and stress.

In the third round interviews new graduate vets talked about physical risk of driving while very tired and a fear they would crash their cars driving to calls. They also described injuries suffered doing clinical work, from a wide range of species including dogs, cats, farm animals and horses. Such injuries were considered usual, and part of the job. Physical injuries were not volunteered unless specifically asked, although experience of it was common and for some had an impact on mental health.

The interaction between physical and mental ill health was reported as operating in several ways: some felt the long hours of veterinary study had compromised immune function and made them more susceptible to illness. For some it was the extent of their hours worked and demanded of them, mediated by lack of sleep and tiredness, for example a lowered threshold for epileptic seizures when tired, or risk of crashing a car without sleep. Others saw practical aspects of veterinary work - lifting animals, restraint, injury from animals, disease caught from animals on placements - as causal for physical injury or illness, and they said that the physical illness had then affected their mental health by causing stress. A third aspect to this relationship was seeing physical illness as an indirect consequence of mental ill health, mediated by self-neglect due and consequent poor diet to long hours. Other students talked about the mental and physical impact of poor housing. For some, university workload and structures of clinical work meant it was difficult to access medical treatment with the consequence that conditions persisted and became more serious.

Not being able to access treatment because of university hours was reported by all students who described living with long term physical health conditions at university. Participants described how this was not only due to long days of lectures at fixed times, but also due to the team nature of shared work on clinical placements where there was peer pressure not to take time away:

“It [a life-limiting health condition] has meant that I’ve needed a lot of time off to go to hospital visits, and people can become quite resentful for you not being there...students...you feel bad for leaving them in the lurch, [they] think well [we’re] in here busting a gut while

I'm sitting in a hospital waiting and [they] think that's not how to be a team player"

(Interview 3a)

Some students felt that this difficulty in taking time away from clinics due to peer pressure affected health behaviours and made them wait longer than they otherwise would have to seek treatment:

"There's been a couple of times when I thought I just can't make that appointment. I know I've got to go but I can't make it, it's just going to have to wait [...] the chest infection was almost pneumonia because I'd left it for so long"

(Interview 3a)

One student described how, even though they had made arrangements for an appointment early in the day and arranged cover for the cases they had responsibility for, they still struggled to get time to attend the appointment. Students also described how personal responsibility, a sense of duty, and the geographical isolation of the vet school contributed to this difficulty:

"I didn't want to leave people in the lurch, you know, and I thought well if I go to the appointment for this then I've already had one doctor's appointment this week. And then it's not as if, because of where they're located it's not as if it's a case of 'right, I just need to pop out for half an hour'. A lot of the time it's [...] the whole morning or I'm not going to be here at all"

(Interview 3a)

Students described that this tension about time away from clinics and expected shared responsibility of the team was difficult to negotiate with other students, and impacted on relationships with other students and staff. There was also pressure from clinicians not to take time away from clinics for appointments, revealing cultural issues around sickness. Students described how those who took time out were seen as "flaky" or "timewasters" and "trying to skive off". Others described when requesting leave from clinics to

attend a doctor's appointment they were made to explain to the clinician what was wrong with them:

"I appreciate that they [university veterinary clinicians] must get time wasters, but I put it forward to them that I've gone and made this appointment for this time, I realised that on this day we don't have as many consults, and we'll be in rounds and I've made all the provisions, I explained all that but it's still like 'Where are you going? Why?' you know. And you're just like 'I don't know what more I can give you, it's just being unreasonable now.'"

(Interview 14a)

Students also talked about how they found it shaming having to report to clinicians what they were taking the appointment for. Although this was not university policy around sickness several students described it happening, and reported shame if this was for a mental health condition.

Another issue discussed was difficulties experienced with veterinary study after physical injury, and stress caused by adaptations to clinical training not being made. There was a lack of clarity of which parts of the course they were able or expected to complete while injured. One student described contacting a number of staff to find out which practical teaching sessions they could attend with a serious fracture but not getting an answer. They felt expected to attend practical teaching on crutches, then found they were not allowed to take part in the session. There was a low awareness among students of the disability service at the university, beyond allowing extra time in exams. One student who had a major fracture talked about how a clinician carried a chair for them:

"[the clinician] did start carrying a chair round for me in a farm animal tutorial, which was about the only concession I got from vet school!"

(Interview 15a)

Impacts on physical health was also described by participants in second and third round interviews, where participants generally talked more readily about

physical than mental health concerns, perhaps reflecting increasing internalisation of taboos about disclosing mental health problems within the profession. Participants particularly talked about not being able to take time off work due to injury or ill health. This pressure seemed to come both from self and from workplace. Taking time off for illness was perceived as a weakness and letting others down, both clients and other staff:

“The vets are really bad, like myself included, at taking time off. Because you have a whole... like if I felt ill tonight and I wanted to take tomorrow off, I know for a fact that I’ve got a full consult morning and afternoon. And so for me to do that, like there’s no-one around that can fill in with that. Everyone does it, everyone just comes in whether or not they’re well enough to.”

(Interview 9c)

Illness in practice was not only a threat to training, as it had been at vet school, but also a financial strain. Participants expressed concern about how they would be perceived by employers if they took time off. A number of participants did not have contracts of employment and were unsure about their working conditions including right to sick pay.

## **4.5 What influenced participant mental health?**

Throughout all three rounds of interviews, participants reflected on what they felt influenced their mental health. Mental health was broadly defined during the study and interpreted using the World Health Organisation definition of mental health, reaching beyond medical models and pathology to a state of wellbeing. Because of this, reflections on what influenced mental health included positive aspects of mental health, and included all participants. Even if they had not experienced a mental health condition, all participants were considered to have relevant mental health experience in this study because they all had experiences of mental health states, including positive mental health and mental wellbeing.



During the interviews, participants were asked what they felt influenced their mental health, either positively or negatively. Responses showed the dichotomy posed by the question - that an influence be either positive or negative - to be flawed. Many factors had both positive and negative impacts. Influence was nuanced and went beyond the simple dichotomy in my question. Factors also interrelated and moderated one other, such as pressures of work contributing to a lack of time to pursue activities which had been protective for mental health, such as exercise, and so having a negative influence on mental health. These factors are described here and examined in further detail in subsequent sections of this chapter.

#### **4.5.1 Overview of factors influencing participant mental health**

In the first round interviews, factors that students identified as having a negative impact on their mental health were coded in several broad themes. Factors students said had a negative impact on their mental health were: veterinary training and vet school, university life, and personal factors. At first when analysing these I attempted to separate the factors. However it became evident that this separation was artificial and flawed. During analysis I came to understand this interrelatedness to be part of veterinary identity encompassing other aspects of life, and it is explored further alongside the impact on mental health in this chapter and in Chapter 6.

Concern about student mental health exists across the spectrum of higher education, not only for veterinary students, and factors related to the wider experience of university life are not unique to veterinary students. However some of these, such as debt, may be particularly heightened for veterinary students, who have a long taught course and compulsory placements during holidays which makes regular employment difficult. There were personal factors - some interrelated, some less so - but the biggest theme, and the one to which students attributed the greatest impact to their mental health, was aspects of veterinary training.

Factors related to veterinary training with a negative impact on mental health included: pressure from self, high personal expectations and standards including an intolerance of failure, pressure from peers, pressure from family, pressure from the institution, self-reported perfectionism or high personal standards, and a feeling that they should always be working. Pressure was contributed to by a perception that they or their family had heavily invested financially in their education, the pressure of debt, and psychological pressures from being financially dependent on family or partners during study and following graduation.

Exams were reported by the majority of students as a cause of stress, and for some were a contributor to psychological distress. The volume of work in terms of time spent at veterinary school on clinics, the volume of veterinary study in terms of time at classes, the amount students had to learn outside classes, and written work were also raised as negative influences. Social pressures and competition at vet school were significant for a number of students, and contributed to poor mental health and stress for those affected.

A common theme affecting mental health and wellbeing was a lack of time to continue activities which participants found were positive for their health. Some students described how being overwhelmed with work meant that they found what they perceived to be a “good diet” hard to maintain. Diet was a commonly mentioned factor, the idea of a good diet including home-cooked food, vegetables, and for some ethically farmed and locally or home-sourced meat. Many were self-critical of their diet and felt university had impacted this negatively. Work demands also led to inactivity and, for some, a lack of time to relax.

Being away from pets, and institutional factors that made pet-keeping difficult such as long hours and pets not being allowed at clinical placements was identified as a theme for a number of students. Homesickness, being away from family, and for some being in a different country they had never even visited before travelling to vet school had a negative impact on mental health. Students raised concerns around money pressures, debt, and concerns that

as individuals they may have personality or genetic pre-disposition to mental ill health. Of all these factors, the most commonly reported were self-pressure, exams, volume of work and giving up activities that had been protective.

The transition to practice affected participants' mental health in a number of ways. The development of professional identity and the acquisition of values and cultural norms associated with veterinary medicine were important parts of this. These are explored in more detail in Chapter 6.

Aspects of veterinary clinical work that influenced mental health in the second and third round interviews included responding to disaffected, "angry" clients, euthanasia, having responsibility for animals' lives, welfare issues that caused moral distress, unclear communications and expectations regarding clinics from employers, bullying by peers, and criticism and shaming by clinicians.

New graduate vets found that the pressure of finding somewhere to live, poor conditions in practice-owned or privately rented accommodation, not having time for their pets, concern whether they were ready to practice, interpersonal team worries, practical skills and communication skills worries, looking for jobs, rejection from jobs without feedback, time constraints on professional loans, and expectations at work had a negative impact on their mental health. Participants with pets expressed guilt over lack of time if they kept pets with them, or loneliness if they left pets geographically distant with family. Performing euthanasia, difficult clinical procedures they did not feel competent at and were not supported for, time pressures where allowances were not made, criticism from other practice staff, and ethical concerns also contributed to stress. Being unsupported at work was particularly significant for new graduate mental health, as was feeling bullied in the workplace or feeling that they did not fit in to the team. Complaints and RCVS regulation were also concerns that impacted mental health.

In the third round interviews, similar themes were identified. Lack of clinical support was still a concern for many, though not to the extent it had been as

a new graduate in the second round interviews. Pressures from managing other staff and practice finances, often without training, had become sources of concern. One participant described how, within 6 months, their job changed from being a supportive internship in a seven-vet practice to them being the most senior vet in the practice:

“There was me and an intern and all the clients [...] we were working a one in one rota [...] I was the only one who knew how the practice ran and I was the only person who could do all the clients and the clients all knew me, so if anything happened it all came back to me.”

(Interview 5c)

There were also concerns about the influence of, and the impact that their veterinary work had on, work-life balance, family, relationships, finances – especially when compared to peers with whom they had been at university and who had followed other professional career paths - and concerns about whether they still wanted to work in veterinary practice. For many there was a sense that veterinary work had not met expectations.

Through expressing these sources of difficulty and times of hardship, as well as in other parts of the interview, a strong sense of shared values and culture, beliefs and meaning for participants of what it is to be a vet was identified. Through analysis, these factors were combined to generate a strong shared sense of identity and aspects of veterinary culture which in turn had unintended negative consequences for mental health.

The importance of veterinary identity in influencing individual mental health started to become clear when coding the factors that students and new graduates said negatively impacted their health. In analysis I tried to differentiate these into personal, university and veterinary factors, but personal and veterinary factors were often inexorably intertwined - for example, the moral distress caused by ethical conflicts and its impact on individual health. Personal values and ethics, shared values, and the reality of veterinary work and expectation, combined to create situations that

participants could not resolve ethically, and so caused distress and contributed to mental ill health. Over the course of transition, clinical, ethical, and personal values combined to create an individual identity of a new clinician, but this was formed in the context of a strong fixed sense of what it meant to be a vet, and beliefs around what veterinary work required. Over time, clinician identity and ethics became part of the self, and values that underpin veterinary work became personal, key factors in influencing individual mental health.

This overlap of, and interaction between, university, veterinary and personal influences on mental health was described by all participants. Becoming a vet was so much more than a course of study. It was key to individual identity, but although seeking to assimilate to group identity brought closer to professional and personal goals, it came at a potential cost for mental health. The sense of acquiring veterinary identity was the biggest factor affecting veterinary mental health in students and new graduates. Support was the key moderating factor in whether difficulties contributed to mental ill health and the level of harm caused. Support and identity are examined in more detail in the subsequent two chapters.

As well as identity and the moderating role of support, analysis of all of the influences on participant mental health which were described in the interviews led to the generation of five subthemes which had negative consequences for student and new graduate health: expectations, aspects of veterinary training and work, giving things up and obstacles to support, culture and beliefs around veterinary mental health, and positive influences on mental health. Expectations included expectations of both mental health and transitions, social pressures and expectations of participants, and how all of these influenced mental health. Some of these factors were influenced by structures of veterinary training. Others were cultural, and gave insight into the effects of beliefs about veterinary mental health on the mental health of participants.

## 4.5.2 Expectations:

### 4.5.2.1 Self-pressure

Expectations and subsequent pressure to meet them came from a number of sources for students and new graduates. Pressure from self and personal high expectations were important for nearly all participants and had a range of negative influences on health. Several students self-identified as having what they described as “perfectionist” traits:

“I think it just comes from being a perfectionist, like wanting to do the best. Like if my best isn’t the best it’s not good enough”

(Interview 8a)

Others were also explicit in linking the self-pressure to personality and saw it as something that was common among other vet students, and fixed:

“I’m a very stressy person when it comes to exams and stuff [...] a type-A personality, as a lot of people are in vet school, and yes, it makes things really tough on myself and I know I don’t need to do that but I guess that’s just how I am”

(Interview 17a)

The fixed nature of these views seemed to contribute to a passivity regarding mental health: that it was a fait accompli that veterinary work would involve psychological suffering, and that no one could help if they were in difficulty. This in turn affected health behaviours. One student explained why they had not sought help for depression whilst at vet school:

“I think it was maybe pressure from myself, [...] [I’m] a bit of a perfectionist, I should be able to deal with everything”

(Interview 17a)

This sense of not only avoiding seeking specialist help, but also that they should be able to do everything alone was seen in other aspects of veterinary student culture, and is explored in Chapter 6.

The transitional difficulty of having been high achievers in previous school environments to becoming average in a veterinary environment also encompassed beliefs around perfectionism and high expectations:

“If I don’t get above average or one of the best marks, it’s like ‘well that’s rubbish’[...] in school your grades, well my grades were always 90% or something. Here they go down to 60, and that’s meant to be really good, and you think ‘that’s rubbish, like 60 is just pathetic’”

(Interview 8a)

There was a sense that anything less than near-perfection was not good enough:

“If 100 is there to get, or 90 is there to get, why can’t you get it?”

(Interview 8a)

Students who felt they had adapted somewhat from this described a period of adjustment that happened at vet school:

“I think it’s readjusting to... [...] I understand that now, but back then I was thinking like ‘oh, who am I to get 60, I’ve never had this in my life, I’ve always had nearly top marks’”

(Interview 8a)

Participants did recognise that this self-pressure had unhelpful consequences for them. Some described managing this tension in the language of battle or competition - a fight between the knowledge that the pressure was not helpful, and a drive to still do it anyway:

“I try to say to myself to go to bed at this time or we’re going to do this, have a shower, go to bed. It doesn’t always happen [...] [I] try but not always win”

(Interview 5a)

When asked if they felt the reasons they didn't win and were not able to rest were to do with pushing themselves, or because of the volume of work required, the student, who had experienced physical tiredness which they attributed to stress, said that it was pushing themselves rather than imposed by the university:

"There's not always a set of 'should be doing these things', it's almost finding things to do"

(Interview 5a)

There was a sense that this self-pressure was part of the veterinary experience, which was also reflected in the way other aspects of life were given up by many participants for veterinary advancement, whilst looking for veterinary work to do:

"[It's] really silly because you think 'oh, I could just do that bit of paperwork that's for vet school' – it's never for something else!"

(Interview 5a)

The student was not alone in identifying that the work could be done at another time, but they chose not to:

"I could do it tomorrow but somehow it ends up getting done tonight at 11 o'clock and it takes longer than you expected and then you think 'why didn't I just leave that for tomorrow?' I like to have things done and always working to a timeline [...] I know that if I get something done, I know something and that might be useful"

(Interview 5a)

This quest for knowledge at the expense of wellbeing was not entirely independent of workload pressures however, and they went on to talk about the pressure of the workload. The combination of high workload, intense self-pressure and giving things up was a theme for many students, and considered part of what it took to become a vet. This also had consequences for mental health which are explored more in chapter 6.



Self-pressure also related to financial pressures. One student who had undertaken veterinary medicine as a graduate degree and paid fees to study talked about how the cost of study contributed to self-pressure:

“It has done [felt like a pressure] [...] always thinking ‘right if I feel in the middle of it and I have to leave, that’s a lot of money that I’ve spent trying to figure out if that..”

(interview 17a)

The fear of failure was part of this, and financial consequences of that:

“Like doing it [the veterinary course] and not being able to manage, so it has always been in the back of my mind the whole time”

(Interview 17a)

#### **4.5.2.2 External pressure**

Several students talked about how they were fulfilling parental dreams as well as their own:

“My mum is like super-keen, I think she’s like living vicariously through me wanting to be a vet – so I think that’s quite when I’m like ‘oh my god, I don’t want to do this’, I know she’d be super annoyed if I stopped”

(Interview 13a)

The role of family was complex. As well as fulfilling dreams that had become their parents’ too, some felt pressure directly from family, others from self so as not to disappoint family. Parents were important influences for many; this may be particularly true for vet students compared to less competitive entry non vocational degrees. To gain a place on a veterinary degree course most students have to perform weeks, often months of placements in animal husbandry roles and shadowing vets before applying to vet school. One UK school currently demands that applicants complete at least 10 weeks of work experience in this way before they apply to vet school. Some students were

influenced by parents who are vets or farmers, but others had relied on the support of parents to transport them to rural practice placements during school time and holidays. This heavy parental investment of time and resource has a number of potential impacts and makes access more difficult for students without family support or travel resources, from urban environments or without veterinary connections. It also may have contributed to expectations for those who had received that parental support:

“It’s more pressure than anything else. Like my parents don’t pressure me but I feel pressure to, I don’t want to say ‘impress’, but just to make them happy and make them know that their money isn’t going to waste and everything”

(Interview 27a)

Parental, family, and sometimes school pressure relating to veterinary medicine was experienced well before vet school for some students. Some talked about parental support sometimes feeling as a pressure from childhood:

“I knew from such a young age, I’d worked, I’d always worked and I was always top in the class because I always knew, from such a young age, because dad said ‘well you’ll have to be top in your class’, so I knew I had to be top in the class, so I worked. So I was always top in the class”

(Interview 29a)

Like self-pressure, pressure from family also interrelated with other financial pressures such as giving up things of personal importance for vet school. One student who had studied veterinary medicine as a graduate degree and who was in a long term relationship talked about the impact of the cost of the degree on their lives, and the way this added to the pressure they felt:

“I’m thinking ‘oh we could’ve put a good deposit down for a house with that money”

(Interview 17a)

Others had delayed relationships or delayed having children because of their veterinary study, which contributed to family tensions.

Some students felt pressure from peers and described peers comparing marks or experiences on social media. Pressure from the institution was problematic for fewer students. A few did feel pressure from university teachers to work, but these were much less commonly described than pressure from self or family. Peer pressure was more common than institutional pressure and operated in complex ways. This is described in more detail in Chapter 5.

#### **4.5.2.3 Social pressures and expectations**

The community and collegiality of the veterinary course was at times a source of great support for participants, and was greatly missed after the transition to practice. There were also social pressures from veterinary student culture that negatively affected wellbeing for some.

Students and new graduates identified support from peers as often helpful, and camaraderie and collegiality at vet school were an important part of the experience for many. However, interactions with peers were complex and not reported in an unequivocally positive way. Social pressures, particularly pressure to conform to expected behaviour around drinking alcohol and “going out” had a negative impact on some students. These social pressures, particularly around alcohol, were raised as factors that had caused problems for mental health and led to feelings of isolation. This was especially experienced at the transition to university, because students felt that many of the activities during university orientation revolved around alcohol:

“The first week of freshers week was horrifying [...] they were all really friendly but I went out and they all just drink themselves sick every night in freshers week and I’m like, this is not what I’m about”

(Interview 1a)

One student described finding that some student support systems within the vet school involved alcohol too. When discussing the “mummy and daddy” system where second year students are allocated a first year student to mentor they said:

“It is more of an excuse to just drink with the first and second years together”

(Interview 1a)

They also highlighted how graduate entry students were excluded from this system and not allocated a mentor. Drinking was equated by several students with “being social”. Not drinking made it harder to find friends:

“I was never particularly a social person. I think I can count on one hand the times I’ve been out drinking while I’ve been at university”

(Interview 3a)

Although these students did describe finding other like-minded students, they felt it took longer.

Other students talked about how other aspects of veterinary life, including veterinary sports teams, involved alcohol:

“That was another issue for the whole drinking thing – it’s actually a peer pressure environment being on the [sports] team, to go out and drink”

(Interview 9a)

This student described how, despite their love of sport and ability, they felt they didn’t fit in the team:

“I just love the sport itself and I really like training, because you were with everybody and you’re having good fun [...] but I found the same problem, that to be really close friends with everybody you have to do the whole going out on Saturday night and getting really drunk, and that is that pressure. I found that really hard because it was a sport that I really enjoyed but I kind of

felt a bit out of the whole group of people when I wouldn't be doing the drinking side of it really."

(Interview 9a)

Some participants described those students who socialised and joined in with the drinking as being "more fun".

Students with experience of mental ill health found the drinking culture excluded them. One student with experience of an eating disorder said:

"A lot of the social stuff at uni, [...] all the balls and dinners and stuff, it all seems to be arranged around food and alcohol"

(Interview 13a)

This student talked about how their eating disorder precluded them from taking part in activities throughout vet school:

"I didn't really do any of the freshers week drinking kind of things and, like still kind of won't go out..."

(Interview 13a)

Being seen to fit in and conform to social pressures seemed of great importance to students. Students talked about how fitting in was especially important during final year on clinical rotations when they worked in small groups. Several students who self-identified as not fitting in with their group described experiences and behaviour from other students in their group which could be considered bullying. Some other study participants also talked about the individuals who had described not fitting in when talking about their clinical experience, and how they had acted to exclude them from activities, and that they considered their time on clinics more enjoyable when the person who perceived they were being excluded was not there.

Social fit included assimilating to a complex set of pressures around competition and achievement. High achievement was valued in oneself but

sometimes resented in peers. Many students described competitive behaviour:

“It is very, very competitive [...] when exam results come out, they’re always asking ‘how did you do, how did you do?’, they want to know that they’ve done better”

(Interview 18a),

However, being competitive was seen as an undesirable trait, usually ascribed to others but not themselves. Peers were seen as potential supports, but also potential sources of competition and stress contagion:

“There’s one person that’s always completely stressed out about everything and I do find it difficult to be around people like that [...] you think ‘oh, maybe I should be stressed, why are they stressed? Should I be doing more work?’ and it’s like a horrible cycle like that”

(Interview 11a)

Stress contagion came up often in the interviews, and a number of students described “avoiding” other vet students especially in the lead up to exams. This effect was not experienced from non-veterinary university students.

### **4.5.3 Aspects of veterinary training and work**

#### **4.5.3.1 Exams**

Exams were one of the most commonly cited mental health influences among the final year students. One student regarded failure in an exam as a direct contributor to a suicide attempt. Others directly attributed mental ill health to the pressure of exams. Experience of exams was not entirely negative. Some students talked about how they felt the vet school had acted to minimise the stress caused by the structure of the exams:

“They’re not going out of their way to cause you stress, it’s just you have to do something that inevitably is going to provide you stress so it’s not... Like they can’t do anything about that because you have to assess us.

I know people... And in that respect they've already taken away the essay exams because that caused too much people too much stress"

(Interview 29a)

Exams were seen as a necessary step to get to a positive goal. Some students reflected that vet school had both positive and negative impacts on their health:

"Positive, because I'm doing what I want to do, [...] and I couldn't be doing what I wanted to do if vet school wasn't here. You couldn't be a vet if you weren't at vet school, and that's what I want to do"

(Interview 29a)

The more negative elements of vet school were for this student associated with exams, but they were seen as inevitable, and part of getting to a bigger goal:

"Negative in the way that obviously things that cause me stress is like coming up to exams, or doing a piece of written work, but they're like a necessary evil"

(Interview 29a)

Despite students describing exams as stressful, a number of students also talked about a process of habituation to vet school exams. They were perceived as different to, and more challenging than, school or other degree exams, and most difficult at the time of transition from school or other degrees to veterinary medicine. Some students reported that it was possible over time to get used to exams and learn how to manage them:

"I think it has improved. I think it's getting used to, exams specifically, it's getting used to what they want and I think when you get used to the system then you stress less about that and you can focus on what you need to do and so it gets easier, definitely"

(Interview 28a)

For some students there was a sense that exam-related pressure and mental health impacts could diminish as this habituation occurred:

“I think I was too stressed out as I started, like every year I’ve gotten calmer with like studying and exams and things like that. And I think if I could’ve, not that I would ever do it again, but if I could put back time and like if I could’ve spoke to myself as the person I am now five years ago, I would’ve told myself not to be as stressed, and to not have put as much pressure on myself”

(Interview 24a)

Some students described exams as potentially positive, giving structure and a measure of assessment which they had found in some respects useful:

“It will be funny having had exams every year, or every few months for like the past, yes... For most of my life. And not to have that will be strange, not to have someone telling you you’re doing OK”

(Interview 10a)

There was a sense of reflection that with the benefit of hindsight exam-associated worry or stress had not been proportionate to the exam stressor.

There was a sense of impossibility at the scale of exams:

“I think it’s just being faced with this task of, you feel like you’re going to be asked potentially anything of the last four or five years and it’s this kind of impossible situation of you’d like to review everything if you could but physically that’s obviously an impossible task with the amount of time”

(Interview 28a)

Reflections were also common that feelings around exams were not necessarily logical:

“I guess it’s feeling unprepared even though you have, logically, you have had this training and you’ve gotten to where you are for a reason, because you’ve put work in, but you still feel unprepared no matter what I think”



(Interview 28b)

When new graduate vets were interviewed, although they had found exams stressful in the lead up to their finals, most participants expressed not just a sense of relief at having passed their final exams, but also a sense that examiners had been kind and supportive to them:

“I was really impressed with just how, the examiners were very understanding, and obviously having been in that situation themselves, so... It was a lot smoother than I expected it to be”

(Interview 28b)

Resit exams were experienced as particularly problematic for mental health. This was partly due to timing: several students explained how resitting exams at the end of the summer meant they had not been able to travel home to see key supports such as family and friends. Resits were experienced as shameful and embarrassing in a culture of high achievement. For students who resat exams in consecutive years, there was a sense of exhaustion, of never having a break:

“I’ve failed stuff every year, so I haven’t kind of had a break [...] it’s just been three and a half years of constant work [...] it kind of just grates on you when you’re having to resit every summer [...] because of the EMS [Extra Mural Studies] that you have to in the summer, you don’t get any time”

(Interview 7a)

#### **4.5.3.2 Volume of work**

After exams, volume of work was the second most commonly cited source of stress at vet school, and for some students was more significant than exams:

“Yes, it’s just, I think it’s just been the workload has been the most stressful thing”

(Interview 10a)

Workload-related stress operated in a number of ways. For most participants, there was not a concern over whether they were able to do the work, the problem was more that workload meant they felt unable to do other things that were positive for them, such as exercise or spending time with their family, and it was the lack of these that affected their mental health. For others it was not fixed, onerous hours and the work being set from them, but a desire to do well and to be prepared - self-pressure:

“There are times where [...] I’ve noticed something to improve on – a fact I need to go and learn some more stuff for this because I know that at some point this week it’s going to come up and I need to know it, so I work really hard and then find out I was a little bit tired to start with and I’ve just pushed it over the edge”

(Interview 5a)

Students described problems with workload as being about “volume” and “intensity” and changing to a different a style of learning. Many described vet school as requiring rote learning:

“I think you had to definitely change the way that you studied because it became more of a memory game for me, rather than learning why something does it. It was more you have to learn these numbers, there’s no other way of doing it”

(Interview 14a)

There was also a sense that some of this learning was not justified:

“I don’t think, you know, you have to learn these number of drugs, suture materials, things like that”

(Interview 14a)

Inefficiency or rote learning that they did not consider justified was a source of frustration and “wasted time”, rather than the material itself being difficult and some found this stressful.

One student who had experienced anorexia nervosa described how workload affected her, the stress of workload meaning that she used anorexia more as a coping mechanism:

“Because I’ve got these extra stresses from being at the vet school, like the exams and the workload, it’s like it’s much easier for it to creep in [...] I use it as a coping mechanism”

(Interview 8a)

Other students felt the workload was not as bad as they expected:

“I don’t actually feel [...] the workload, has been as bad as I thought it was going to be. I don’t know whether I’m just quite good at coping with it and I was quite good at getting in the zone and learning it when I had to”

(Interview 32a)

Workload was often identified as most problematic at times of transition. Four key transition points were identified: from school to vet school , from preclinical years to third year (clinical study), from clinical study to final year clinical practical placements, and from final year to practice. There was a sense of accommodation and habituation - that after the initial transition workload stress lessened and changed:

“With experience through vet school, you start to learn what’s important and what isn’t so important. Whereas in the first couple of years you think everything’s important, must learn everything!”

(Interview 10a)

Students talked about various strategies for managing high workload and still including protective non-veterinary activities in their lives:

“The one week of study period we have before exams is incredibly crucial to me [for study], and so I might not do any of my other things during that week, but during the year, during the rest of the semester, I tend to be able to do quite a bit”

(Interview 18a)

In contrast to high workload causing stress, a few students suggested that long hours of the veterinary course meant that it was potentially more supportive than other courses, as students knew each other better:

“I guess I could’ve been doing any sort of busy, high-stress course. I almost think actually the fact that I was doing vet in that situation probably helped, because, as I said before, there is more of a community, so I lived with my friends but I’d come to uni and I’d see all my friends as well, and you’re with them all the time. Whereas if you’re doing a course with fewer hours or, you know, where you don’t know your classmates, you’ll be walking into a lecture theatre where you don’t really know everyone, whereas here you walk in and everyone will ask, you know, ‘you OK? You look tired, what’s wrong?’ so I think that probably helped actually”

(Interview 33a)

#### **4.5.3.3 Veterinary work**

During vet school, through time on university clinical placements as part of their course, and seeing practice with vets during the compulsory 38 weeks EMS placements, students were exposed to many aspects of veterinary work in a similar way to qualified vets. Some aspects of clinical work and experience in clinics were raised by participants as having a negative impact on their mental health. These became more significant as students moved into practice and were among the most commonly described difficulties by new graduate vets. Transition to practice altered which clinical work factors were experienced as most difficult. Students described fears about how to respond to angry or disaffected clients:

“People [will] get angry that they couldn’t afford the treatment for their pet and [will] lash out at the veterinarian”

(Interview 35a)

Once in practice, interpersonal issues between staff, which were not mentioned by students as a concern they anticipated, had much more significance.

What did persist with regard to the impact of disaffected clients on wellbeing was the sense that veterinary medicine was a very misunderstood career:

“I think some people think ‘oh veterinary, it sounds like a glamorous job, like you’re helping animals and stuff”

(Interview 25a)

This dissonance between public expectation and reality was commonly described by students:

“People just think ‘oh you’re there, like saving animals’, but it’s not, you know, ‘you’re dealing with puppies and kittens all day’. Whereas you’re not, you’re dealing with angry clients and you’re having to put animals to sleep and it’s just not always, you know, happy and great and like you’ve saved something. It can be really depressing some days, I think, depending on what cases you have”

(Interview 25a)

The distinction between the veterinary understanding of veterinary work, and “the general public” seemed to contribute further to the strong sense of veterinary identity: a special understanding of the reality of veterinary life.

Other aspects of clinical work which students identified as problematic for their mental health were exploitative work while training, particularly on some EMS placements. One student described how when a farm’s cattle trough feeder system broke they were left alone with a shovel to manually “shift” three tonnes of feed. Others described gender and age discrimination, sexual harassment, and feeling physically at risk. Uncertainty, unclear communications or expectations regarding clinics, out of hours work on university intensive care unit placements, and criticism or shaming by clinicians were also described as contributing to distress and mental ill health. These are explored in more detail in Chapter 5.

Moral distress and ethical conflicts were important. Moral distress was developed and became an important theme and had a direct impact on student wellbeing. Several students said that seeing animals suffer as a result of what they considered to be unnecessary interventions or over-treatment in university clinics was the most distressing experience they had whilst at university, and described breaking down in tears and being unable to drive home safely because of their level of distress. The role of moral distress is examined in more detail in Chapter 5.

#### **4.5.4 Giving things up and obstacles to support**

One of the most common adverse influences on mental health discussed by most students relating to the veterinary course was things they had given up for their veterinary study, and to pursue their veterinary career. These ranged from time given up during childhood, such as completing work placements to use in evidence for their veterinary school application instead of spending time with friends or doing school activities, to giving up activities and supports that helped their health because of workload pressures at vet school, for example sports. This also encompassed not being able to spend time with family due to geographical location of vet school or the cost of returning home. Timing of exams, particularly resits, meant some students could not travel home to see their families during holidays. For some the impact of giving things up was profound:

“You’ve got to be prepared to give up part of your soul  
for this thing I think”

(Interview 3a)

Others talked about deeply significant personal sacrifices such as delaying having relationships or children, and the impact veterinary study had on personal relationships. Financial sacrifices were common, for example paying veterinary school fees instead of the deposit for a house or paying for their own wedding. Giving things up as a prerequisite for veterinary success was such a strong theme that it was identified as one of the core ideas about

what it is to be a vet, and is explored in more detail in Chapter 5. Giving things up, although considered prerequisite and unavoidable by the majority of participants, was sometimes so profound and had such an impact that it had both direct and indirect influences on mental health. During one interview, when talking about a sport the student had been talented at, and had to give up during their time at vet school because of pressures of workload, the student became so distressed that I terminated the interview and sat with the student for twenty minutes while they cried. Many indirect consequences for mental health were associated with isolation. These included the loss of protective non-veterinary support networks, the workload, practical placements during holidays limiting contact with friends from home, pressures of vet school feeling isolating, and a belief that veterinary knowledge was needed for specialised support. This isolation was partly due to the geographical isolation of the vet school making socialising with non-vet students more challenging, and partly due to the belief that non-vets didn't understand the stresses such as the impact of a bad day on clinical placement. Thereby as a result of this belief, participants limited other social contact and support.

Other obstacles to support included stigma about mental health, geographical and time difficulties in accessing support, and a sense of shame at asking for help. These are explored in more detail in Chapter 5.

#### **4.5.5 Culture and beliefs about veterinary mental health**

One of the strongest themes generated from the analysis was the importance of culture around mental health in determining individual behaviour. There was a strong sense of shared veterinary identity, with values which in some cases acted to undermine wellbeing. There was also stigma around mental health, both self-stigma and public stigma, which affected health behaviours. The culture relating to mental health existed in the context of beliefs around veterinary mental health that were almost universal among participants.

Almost all participants believed that veterinary study and veterinary work were stressful, particularly the first few years after graduation. There was a sense of inevitability - that veterinary work did impact mental health adversely - which few students questioned. For some, this inevitability extended to suicide too. In their first interview a participant who had attempted suicide during the previous year talked about the attempt and said:

“It’s like if I’m not a vet, what do I do? And if this is what it takes to be a vet then that’s what it takes. [...] Either I get out at the end of it or I don’t, you know. Whatever, I won’t give up, vet school anyway [...] That’s what it does, that’s what vet school does”

(Interview 8a)

These beliefs started at different times, but were almost universally held by participants by the time of the first interviews for this study in the students’ final year at veterinary school. There was a sense that it was expected knowledge; one student said they had been asked about the veterinary suicide rate during their interview for vet school. Others learnt about these beliefs whilst at university through witnessing others’ experiences:

“I knew that it was hard work and stressful, but one of the things I didn’t really know was the kind of mental-health and kind of that issue. I kind of knew it was there but didn’t know that it was, I was going to see as much of it as I did.”

(Interview 10a)

Some students found this through their own experience of stress, which started early in their veterinary training and persisted:

“It [vet school] took 10 years off my life in terms of stress!”

(Interview 25a)

These commonly held beliefs described fears around transitions too, particularly the transition to practice. There was an expectation among many



students that the first 2 years in practice (this specific figure being suggested by a number of individual participants) being particularly challenging. Some suggested a balance in their expectation, but that it would still impact mental health:

“Everyone said it’s like one of the toughest years and it’s going to be really hard and a really steep learning curve. Which I’m quite excited about as well, like getting that chance to learn everything. But I think there will be some ups and downs, like I really expect that, to some days just be exhausted and crying!”

(Interview 17a)

This expectation of new graduate life having a potential adverse impact on mental health was universally held: when asked what new graduate life would be like, every participant referenced stress.

Some students questioned the way mental ill health was an expected outcome of veterinary work, and started to question whether this was in itself, problematic:

“I think it is tough and stressful [...] I think people put so much emphasis on it now, you know when people say... If someone says ‘oh you don’t look very well’ and you thought you were feeling a little bit ill, you’re like ‘oh, yes, I feel really ill’, I think that’s kind of how it’s gone”

(Interview 29a)

They went on to question whether there was an element of self-fulfilment about the difficulties encountered:

“I think there’s always been so much emphasis on it now that you already go into it believing that it’s tough and... A bit like in the way that I thought vet school was going to be really hard work because everyone said it was really hard work”

(Interview 29a)

Beliefs around personality affecting mental health and veterinary medicine attracting a particular personality “type” were common:

“Vet does impact [mental health], but then again it’s the old thing of is it that that’s the impact or is it that vet is attractive to people of a certain personality trait, who are more likely to succumb to issues like that”

(Interview 33a)

Others saw mental health and stress from a more individualistic perspective:

“I think it has the potential to be [stressful], but I think it’s down to the person, the individual, to how you should deal with it sort of thing”

(Interview 31a)

#### **4.5.6 Positive influences on mental health**

Participants also identified factors which had a positive impact on their mental health. These included contact with family and friends, partners, pets, and vet school peers. Exercise was a positive factor, both individual such as walking, running, yoga, or going to the gym, and team sports including rugby, hockey, or other activities including martial arts, horse-riding, shooting, and climbing. Three students had competed to almost Olympic level in their sports before vet school and talked about how attending vet school had adversely affected their chance of competing in the Olympics. Veterinary study was helpful for some by providing a distraction from other problems and a focus and a motivation.

Also experienced as helpful for mental health was time to rest, spending time away from vet school, learning to accept imperfections, counselling, eating well or nutrition, travelling, music, TV, and church. Counselling included the student counselling service, private counselling, and specialised NHS or private therapy.

For new graduate vets, support in practice and support at work was the most commonly mentioned factor in determining positive mental health, and support outside work from family and friends was also important to many. Being able to have pets living with them, and living with a partner or family rather than living alone, were also helpful, as was working in a practice that had similar values and ethical standards to them. Work was helpful for wellbeing where supported. Supported new graduate vets found aspects of work rewarding and good for mental health. Particularly positive was growth in confidence through supported development, and relationships with clients. Practices that involved new graduates in social activities or had other new graduates or nursing staff of similar ages were also experienced as helpful for mental health through providing social opportunities. Social media, although at university having a mixed influence on mental health, had a more positive influence after graduation, with informal support groups facilitating contact between peers. Contact between peers became more helpful after graduation: the transition to practice was experienced as supportive rather than competitive, and helpful in coping with geographical isolation from friends. Taking time to travel before working or for relaxation helped a number of new graduates. Being in work was, for some, protective for mental health, but only where they felt adequately supported. New graduates out of work were worried by being out of work, although this affected some more than others. Factors that made this pressure more acute and increased the impact on mental health were personal expectations, benchmarking against peers, and financial pressures. If moving into work at a supportive practice, these worries were reduced by employment. Positive influences on mental health and the role of support are explored in more detail in Chapter 5.

#### **4.5.6.1 Pets**

Pets were often discussed during the interviews, both as a primary motivator for students studying veterinary medicine, and as invaluable supports during times of difficulty. Such was the frequency that I looked at the relationship between pets and mental health in more detail.

Students who had pets with them at university often described them as the most helpful thing for their mental health. When describing pets they were often humanised as “supporters” and discussed alongside, or above, friends and family. This view conflicted with some of the attitudes to animals students described being taught at university, and there was a reluctance for students to talk about their love for their animals openly as having influenced their university application. Although a major personal motivator, it was a motivation that was seen as “not the right answer”. This tension is explored in Chapter 5.

The role of pets in supporting mental health was complex. Students who had pets with them at university described them as great supports, a reason to exercise, and a break from the pressure of vet school. Other students who were separated from their pets whilst at university found missing them to be a profound loss. Aspects of university policy were described as contributing to this: students were not allowed to bring their own dogs inside the vet school buildings, and the geographical isolation of the campus plus long work days meant that pets would be left alone all day. After graduation, many participants looked forward to the time when they could get a pet. However, when they did, structures of veterinary work meaning they did not have much time to spend with them were a source of guilt. The role of pets as supporters is explored in Chapter 5.

## **4.6 Mental health in transitions**

The transition from school, other degree, or employment, to vet school was experienced as challenging and with potential consequences for mental health. Reasons for this included the level of investment, the things given up to become a vet, motivation to get to vet school, uncertainty about what to expect once there, and expectations which did not match reality. A participant described this:

“[I] worked really hard at college to get here, it was eat, sleep, think, dream about it, and it paid off, I got here.

But I never knew what to expect when I got here. And I must admit, it was a bit of a shock to the system”

(Interview 3a)

Vet school was such a long-anticipated ambition and dream for many of the cohort, that the reality was not what they had expected. For others there were no expectations about what vet school would be like and it was seen just as a necessary means to a final goal of becoming a vet, for which they were willing to do “anything” to achieve.

For some students, the transition away from home and previous supports to university involved moving to a different country which they had never visited before starting vet school. The competitive nature of veterinary courses and lack of veterinary training facilities in some countries meant students did not necessarily choose the university because of its location or wanting to live thousands of miles from home, but just because it was their only option to pursue their veterinary goal:

“It was incredibly stressful when I came. Moving over here [...] was very stressful because I didn’t know anyone. I’d never been to Scotland before I moved here, I’d never even visited Edinburgh before I started classes it was just so I had no idea what to expect my first year”

(Interview 1a)

Others did select the university, and some were very happy with the university city, but some struggled to adapt from rural life. Veterinary medicine attracts students who may be more likely to be from rural areas than some other courses. In some cases students, particularly those from farms or for whom animals at home like horses had been a big part of their life, struggled more with this transition.

Transitioning from being considered an excellent student before vet school - often “the best” student in their cohort - to being surrounded by other excellent students and no longer finding they were the brightest academically

was challenging for many students, and was articulated as a difficulty in transition. There was a sense that they could not achieve as high marks as they were used to, either in the marks themselves, or benchmarked against their new peers. This contributed to a sense of being an imposter, and not belonging, and for some a belief that they were “stupid” compared to other students:

“What am I doing wrong? Why am I really stupid? Even when I’m trying really hard?”

(Interview 8a)

The transition to the volume and style of veterinary study was unexpected for many:

“I’d always been quite a high achiever at school, I didn’t think it would be that much different, I thought [...] there can’t be that much to learn. But it turns out there is!”

(Interview 8a)

For some students, particularly those with relevant degrees obtained before vet school, there was a sense that the first two years involved repetition. Students who had been on compressed 4 year graduate entry courses did not describe these as being a greater contributor to ill health than students on the 5 year course:

“My first two years was quite a repeat of my previous degree, I knew a lot of the stuff so I found that quite boring almost, I was like: I already know the physiology of animals”

(Interview 1a)

Almost all students expressed a sense of disappointment that the large workload, especially in the first two years of the course, did not include much contact with animals:

“I thought it was going to be [...] like following cases around and learning as you go. I didn’t expect it to be... first year I think kind of took everyone as a bit of a hit,

because it's a lot of kind of science-based and not very many animals, apart from one dead dog that follows you round for the entire year!"

(Interview 6a)

For some students this focus away from animal contact had such an impact that they started to question their motivation to student veterinary medicine. Some described it as stressful and demotivating, and something that had to be "got through" to get to the end goal:

"That was a bit odd at the start because you're like 'oh, is this actually what...' [...] 'is this actually what I want to do?' [...] I just see it as I had to get through that first year in order to get to my end goal, so I'm getting through it."

(Interview 6a)

As is explored later, working with animals was the primary motivator for studying veterinary medicine – though often unspoken, and considered not the "right" motivation. It was significant to veterinary study being experienced as rewarding. However after graduation, working with clients and people in the practice became more significant as a motivator.

There were several transitions throughout the veterinary course. After the transition to vet school, first and second year were experienced as similar, but third year was experienced by many students as more stressful. The transition to third year was one students talked about having been warned about by older students, primarily due to a perception of increased volume of work. The transition to clinical placements in fourth and final year was something students both looked forward to and feared. Again, information passed to them by other students seemed important in this. Certain types of clinical placements were considered universally more stressful than others, even for students who preferred those subjects and wanted to pursue them after graduation. This was due to workload, hours, and perceived attitudes of staff on the different clinics. Other staff were also important: where students felt criticised or unsupported by nursing staff or support staff, placements

were considered more stressful. Being expected to perform tasks which students did not feel were justified for learning were also identified as a stressor, for example performing large amounts of what they felt to be nursing duties, or seeing themselves as “covering” for absent nursing staff or staff shortages. Transition from a taught environment to the more clinical environment of final year was considered stressful because of a tension between features of clinical work – such as delays waiting for other teams or equipment to be free, or cancelled appointments, and an expectation that the environment should be one of supported learning at all times. Final year was felt as a significant transition:

“First to 4th year I sort of knew exactly what was going to happen and how it would work, and what it would look like, and how the work would feel like, but final years it was quite a change”

(Interview 5a)

The clinical nature of the final year was also however something students enjoyed more overall and reported as more rewarding:

“Final year has been really good because I have enjoyed getting more of the practical hands-on, and it feels like you’re actually more progressing towards being a clinician as opposed to just like collecting a load of facts for the last 4 years”

(Interview 6a)

Rewarding aspects of final year were considered to be patient contact and interesting cases. Some cases were preferred to others and there was a hierarchy of “good cases” for which there was some competition between students. Tensions in final year over responsibility for cases also featured as a cause of stress for some students. Some felt they wanted more responsibility for cases and feared the large difference they perceived between student and new graduate responsibility. Others seemed more fearful of taking responsibility for cases and were content to defer to hospital clinicians.



In the clinical part of the course, concerns that students experienced as stressful were particularly about hours, though this was modified if they felt they were working on “a good case”. Hours spent waiting were considered more stressful and perceived inefficiency was considered frustrating. Being “shamed” by lack of knowledge on clinics because of the volume of work they felt they had to remember was distressing for some students and contributed to mental ill health in a number of ways. One student reported witnessing another student having a panic attack on clinics when being questioned by a clinician, another staying up late at night and suffering stress because they were worried they did not know enough about a case. The impact of shaming was pervasive, and was distressing for students who had witnessed it happening to others, as well as those who had experienced it themselves, and led to concern at how effective they would be at implementing new skills. What students considered as shaming ranged from sarcastic responses to student questions from clinicians, to being questioned to the point of failure in front of other students or clients.

The last two significant transitions were graduating from and leaving vet school, and the transition to work. After graduation, many of the mental health influences persisted, although there were changes through transition. The transition to work was seen both as exciting and “scary”, however when asked, students and new graduates placed fear above excitement in significance of impact. It was not just clinical factors that contributed to this. Difficulty finding work affected the self-esteem and mental health of several individuals, particularly not hearing back from practices to which they had sent applications. New graduates benchmarked themselves against peers, and even asked me in the time before and after interviews how they compared to their peers in terms of how quickly others had found work, how fulfilled and how happy others were. Finding somewhere to live and short start dates for veterinary jobs were pressures for some, and some experienced problems with poor quality housing. For students who left university with debt, paying rent before receiving a pay cheque was stressful, and they relied on family support. This financial dependence on family and

sometimes on employers who provided accommodation in the practice had consequences for mental health for some participants. One described how living in a flat above the practice meant that even when they were not on call, they were expected to perform work for the practice, such as checking on in-patients, which they found exhausting and stressful, and left them feeling exploited. Others found that their practice accommodation was given to other visiting students to share without their consent, which they found stressful and intrusive. Some found practice accommodation to be a helpful transition to a new area, after which they could find their own accommodation elsewhere.

For some new graduate vets, graduation and the transition to work happened together, with some students getting jobs before their final exams and starting employment at the time of graduation. For others there was a longer gap, some not entering employment before the second interview. These transitions had different features. After graduation there was significant relief and celebration, but it was also experienced as a time of “being in limbo”. Participants did not consider that they would be “proper vets” until they started work, and many feared they would forget knowledge from vet school. For some it was a financially difficult time, with no income and dependence on family. Loss of support from university and peers was an issue for some. Participants found a number of ways to mitigate this: some by staying living in the university city with friends for some time after graduation, others by keeping in contact on social media. For others who had been unhappy and homesick at university, moving away from university and going back home was experienced as a relief.

Experiences of looking for work differed greatly in their impact on mental health. Some students were offered work almost immediately, a proportion of these through informal contacts made with practices in which they had completed EMS placements. This was generally positive for mental health and experienced as a boost to self-esteem. However for students who were applying for jobs and being rejected or not having any feedback, looking for work was a source of anxiety and sometimes distress.

The transition to practice in particular was one which all students anticipated as difficult and stressful. There was a belief that the first 2 years in practice would be a time of hardship, and that veterinary work was very different to training. There was a fear of judgement from clients:

“When a vet comes out, it’s always very judging the first bit, to see if they like what you do and like who you are before they’ll get you back out again. So there’s lots of stories about vets not really being allowed to come back to yards, and it’s all about how you come across. [...] I’m worried if they ask you a question that you don’t know, they’ll be like ‘oh you don’t know nothing...’”

(Interview 6a)

There was a sense that being a new graduate vet involved a very different level of clinical responsibility to being a student, and that this was a major jump and a source of stress:

“I think just because of the nature of the work, the amount of responsibility, especially to start with when you’re not used to having that responsibility. And you’re just going from zero responsibility to like 100% responsibility, and there’s not really much of a sort of build-up to that the way”

(Interview 11a)

The transition to practice was seen as daunting and involving a significant skill gap. Some students were confident a new employer would help them, others less so and anxious about this transition. Once in practice, a series of transitions and milestones occurred. Being on night duty alone was one of the most significant, and a source of anxiety.

New graduates worried about the responsibility they held, and it was common for them to feel their practical skills were not adequate for the clinical tasks required of them. This was variable however: new graduates who found more supportive work described this fear as diminishing and described a growth in confidence instead as they realised they were equipped with the right skills, and enjoyed developing them further. This

highlights the importance of support as a mitigating factor in veterinary distress, which is explored in Chapter 5.

Euthanasia, complaints and worry about RCVS regulation were cited as stressors at the transition to practice. Public perceptions of veterinary work as having a high salary and being easy work also contributed to stress for some students, who struggled with the dissonance between public perception and reality. When talking about how they felt veterinary work was both misunderstood by the public and stressful, one student described how people outside the veterinary profession sometimes misunderstood their stress, which impacted who they felt they could access support for it from:

“Stuff like euthanasia [...] it’s not always the sadness of putting the animal down, it’s the stress of making sure you don’t mess up in front of the client. I’ve got the impression from some vets that that’s actually a bigger thing [...] that the animal doesn’t scream, agonal gasp...”

(Interview 4a)

The variability of the workload, and being unsure what was coming in next was also experienced as stressful:

“I think just being on your feet all day and having stuff coming at you from left, right and centre”

(Interview 4a)

Students and new graduates had a number of shared expectations of what veterinary studentship, work, and the various transitions should be like. There were shared ideas and values about this, and a culture relating to mental health which had striking consequences for wellbeing. This is explored in Chapter 6.

Although the transition to practice was anticipated as a final transition in the period included in this study, other transitions were identified which had impacts on mental health. The most apparent of these, experienced by almost all participants, was the process of becoming a vet, in the sense of

professional identity and perceiving themselves to be a vet. This did not occur at the time of graduation or, for most, even at the time of starting veterinary work. Instead it happened later, usually when participants felt able to face difficult clinical challenges alone and unsupported, and for some, when reaching a stage of omnicompetence whereby they could treat any species of animal. This sense of identity was closely aligned with participants' sense of worth and self, and so also with their mental health. It is explored in more detail in Chapter 6.

## **4.7 Mental health, influences and transitions**

This chapter has explored participants' experiences and perceptions of mental health and wellbeing during the transition from veterinary study to employment, after describing the research aims and analysis in sections 4.1 and 4.2. Section 4.3 described participants' experiences of psychological distress, mental health and stress, and analysed accounts of mental health and suicidal behaviour. Starting by describing participants' experiences, it went on to look in more detail at accounts of suicidality both during veterinary study and after entering veterinary employment. It also examined the experience of stress and how this changed during the transition from study to employment.

Section 4.4 went on to explore the complex relationship between mental and physical health including factors such as long hours, poor sleep, poor diet and working conditions and risks which they felt moderated this relationship.

Section 4.5 looked at other factors influencing mental health, including participants' expectations of veterinary work and study, and the expectations and pressures that were placed on them. This relationship was complex but identified a number of types of pressure operating to influence participant mental health. The section also looked at four other factors: aspects of veterinary training and work, giving things up and obstacles to support, culture and beliefs about veterinary mental health, and positive influences on mental health. These themes are explored and developed further in chapters

5, 6 and 7 as we examine support and identity, and discuss the findings in more detail.

This chapter concluded by looking at mental health in transitions. A number of different small transitions were identified during the course of the study as well as the larger transition to veterinary practice, and I discussed how these related to participant mental health.

This chapter has demonstrated the importance of mental health in participants' experiences as they transitioned from veterinary study at university to veterinary work, the range of experiences of participants and their influences, and has started to explore the relationship between transition and mental health.

In the next chapter I go on to look more at support, seeking to understand veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment.

## **Chapter 5 Results - veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment**

### **5.1 Synopsis**

The focus of this chapter is the second aim of this study: to understand veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment.

The chapter is divided into eleven sections. After the synopsis it contextualises the literature around social support theory, transitions to work, and workplace induction, and locates these data in the literature. It then describes the analysis. In the subsequent sections it goes on to describe the themes generated by analysis: participants' expectations and experiences of veterinary study, expectations and experiences of veterinary work, support at university and support in the workplace. It then looks at support during transitions.

Finally it sets the context for later discussion by examining how identity may moderate how support is used and interpreted.

### **5.2 Support, transition and induction**

Social support is an important mechanism for problem-focussed coping, reducing stress and promoting other coping strategies. Social support theory describes two types of social support: instrumental support - seeking advice, assistance or information - and emotional support - moral support, sympathy or understanding (Carver et al., 1989). Although social support theory in problem focussed coping makes a conceptual distinction between instrumental and emotional support, it also acknowledges that they can co-occur (Carver et al., 1989). This chapter examines participants' experiences

of support in the context of university and work, as well as their expectations of support. Chapter 7 goes on to discuss these findings, considering social support theory, emotional and instrumental support in more detail.

This chapter also examines participants' experiences of transition and induction. Successful transition from university to work has been defined as a "state in which individuals are employed after leaving university, perform at levels satisfactory to their employers, and have positive attitudes toward their work and job requirements" (OECD, 2003, Ng et al., 2019). Ng and colleagues (2019) suggested a three stage model for university to work transition: prior to finishing degree, looking for a job, and found and working in a job. This model, whilst relevant for the international postgraduate students in their study, did not quite fit the transitions experienced by the vet students in this study. For most participants in this study looking for a job was a brief phase, associated with minimal stress and difficulty, which is distinct from some other literature on transitions which conceptualise this stage as a peak for stress, change, and transition (Ng et al., 2019). In contrast, for the participants in this study stress was most acute after starting veterinary work.

In their model of university to work transition Ng and colleagues (2019) suggest institutional support, social support and organisational support are key at the three respective phases of university to work transition: prior to finishing degree, looking for a job, and found and working in a job. With the participants in the Veterinary Transition Study, the use of support was more complex, with various inhibitors to accessing support. One of the most important of these inhibitors was the sense of veterinary identity being incompatible with seeking support. This meant that, although present, institutional support was often not accessed at university, and social support was important prior to finishing the degree alongside institutional support when it was used. This is explored further in Chapters 6 and 7. Support in the workplace was complex too: although organisational support was considered desirable and important by participants, expectations of behaviour and veterinary culture inhibited making use of this.



For this reason the findings around support are examined in the context of literature around induction and work “onboarding” as well as social support theory and transitions.

Savickas and colleagues (Savickas et al., 2009) describe a new social arrangement of work in the 21<sup>st</sup> century, which challenges fixed ideas about vocation, stable trait characteristics, and stable employment, and which is characterised by diversification of careers, insecurity, and frequent and more difficult job transitions. Globalisation and improvements in information technologies are described as propellers of this arrangement.

Some of these concerns are echoed in the veterinary industry. The UK veterinary industry has seen significant change within the last 15 years, including during the course of the Veterinary Transition Study.

Corporatisation has been a huge change to the structure of the veterinary industry. There are other pressures and changes too: commercial pressures, global changes, impacts from changes in the animal insurance industry, societal expectations, paradigm changes such as evidence based medicine, and many others (Allan, 2016). These have proved controversial and have sparked debate across all areas of veterinary industry (Roberts, 2018, unknown author, 2017, Statham, 2019). Concerns are expressed in contemporary veterinary discourse around loss of vocation, diversification of careers, and a shortage of veterinary surgeons available for work. Work examining this change and the impact of transition in a changing context on veterinary professionals is lacking. Milligan and colleagues (2013) examined similar issues for professionals in a global energy company. They described a change in the nature of the relationship between an individual and their career (Milligan et al., 2013), framing transition as a challenge for organisations: how best to socialize workers entering new roles to support them to become effective employees. Their study found that graduate induction provided appropriate support for various learning styles including formally, through social interaction and through work based opportunities to apply learning in new contexts. While all of these learning types were experienced by participants in this study, for veterinary graduates the

process was only experienced as smooth and appropriate for some, with many experiencing significant gaps in support needs at induction. These are detailed in this chapter and discussed further in Chapter 7.

### 5.3 Analysis

Analysis of interview data on support from all three rounds of interviews, including field notes and memos, generated six initial descriptive themes which were further analysed to identify 25 subthemes. These are outlined in Table 5-1, and are subsequently examined in turn through this chapter.

**Table 5-1 Summary of themes and subthemes on support**

Theme	Subtheme
Expectations of veterinary study	Not knowing what to expect Hands on Not fitting in Hard work
Experience of veterinary study	Stress Social aspects of veterinary study Experiences of study Professionalism
Expectations of veterinary work	Excitement Stress Responsibility Hopes for support Long hours Ethical dilemmas

Experience of veterinary work	Shock Support Employment practices Gender discrimination Contributing Impact on health Client interactions
Support at university	Expectation of support Support at university
Support at work	Expectation of support Support at work

## 5.4 Expectations of veterinary study

In the first round of interviews, whilst participants were in the final year of their veterinary course, they were asked about their expectations of vet school and whether they had been met. Analysis of responses generated four themes: not knowing what to expect, hands on, not fitting in, and hard work. These are explored in turn.

### 5.4.1 Not knowing what to expect

A number of participants in the study said that they didn't have expectations of veterinary training at university. Two participants talked about never having been to Scotland before they arrived to study at university:

“Just that whole process was very stressful because I didn't know anyone. I'd never been to Scotland before I moved here, I'd never even visited Edinburgh before I started classes [...] so I had no idea what to expect”

(Interview 1a)

Some students said they had no expectation, that the drive to get into vet school and become a vet was so strong that they hadn't considered what study would be like:

Interviewer: What were your expectations of vet school before you came? Did you have expectations?

Participant: I don't think I did, no, I was just really looking forward to finally having a direction in life, you know, and... I worked really hard at college to get here and it was eat, sleep, think, dream about it, and it paid off, I got here. But I never knew what to expect when I got here. And I must admit, it was a bit of a shock to the system.

(Interview 03a)

This is consistent with part of the description of veterinary identity in Chapter 6: that the desire to become a vet sometimes surpassed other considerations, or rendered them comparatively unimportant.

### **5.4.2 Hands on**

The most common expectation of vet school was that study would be hands on, and the most commonly expressed element of this was expectation that there would be animal contact throughout the veterinary course:

Interviewer: What were your expectations of vet school before you came? Did you have an idea of what it would be like?

Participant: I thought it was going to be like final year.

Interviewer: OK.

Participant: You know, like following cases around and learning as you go. I didn't expect it to be... Like first year I think kind of took everyone as a bit of a hit, because it's a lot of kind of science-based and not very many animals, apart from one dead dog that follows you round for the entire year! So that, I think, was a bit

odd at the start because you're like 'oh, is this actually what...'

(Interview 06a)

This was usually expressed as a disappointment or surprise that there had not been more animal contact particularly in the first year of the course:

"In the first two years we just didn't see an animal. That was like the one thing that were all kind of like making jokes about saying: 'I'm at vet school and I've not seen a dog for like three months'"

(Interview 08a)

Students talked about the more "lab based", "science" first year as something to be "got through" in order to get to the "end goal"

"I just see it as I had to get through that first year in order to get to my end goal, so I'm still getting through it"

(Interview 06a).

In describing expectations around animal contact, the sense of not knowing what to expect because the desire to study veterinary medicine had been so strong was present:

"I think I thought we'd see maybe more animals than we do. [...] But I don't think I could imagine what it would be like, I don't think I really thought about that because it was just I wanted to do it."

(Interview 34a)

Students also talked about how the course not being as hands on as they expected caused difficulty for students who had not had animals at home:

Participant: I was surprised actually how... there wasn't as much sort of animal handling as I anticipated. I thought we were going to do more of that, but I sort of realised that actually you get that from doing the EMS sort of thing. So initially I was a bit like 'oh..' and throughout the whole course I've always thought that it

would be nice to do more animal handling but it might be just because I don't have very much animal handling experience. Because most people, like, things about dogs and stuff, it comes second nature to them, but it's stuff that I've had to learn sort of thing.

Interviewer: Is that because you didn't have your own pets?

Participant: Yes, because I didn't have my own pets. Like I took every opportunity I could to like look after friends' pets and stuff. But, yes, never really had a great experience, so I've always thought that people have had an advantage over me, like things that just second nature to them.

(Interview 31a)

### **5.4.3 Not fitting in**

Some participants expected that they would not fit in at vet school. Several participants who raised this were mature students with partners, previous employment, and family responsibilities. For others, the impact of vet school on personal life wasn't something they had expected:

Participant: I don't think I realised that five years is actually quite a long time to spend away, or to spend doing this one thing.

Interviewer: Sure.

Participant: And not earning money and not having a job and being like a real person!

(Interview 08a)

This sense of life suspended and being perceived as not equivalent to non-veterinary peers, whom they saw entering employment or making life changes whilst they were at vet school, was raised by several participants. Others described expecting vet school to be an experience where they felt

known. One person described not knowing everyone in the year group even in the final year of study. Not feeling known was an inhibitor to accessing emotional support. Two talked about their perception of personal tutors and clinicians in clinics not knowing their names or who they were:

“I think I thought it would be a lot more practical than it was. And maybe a smaller sort of field too... Because it's quite a big year now, so I mean there's people in my year now that I don't recognise, got no idea who they are.”

(Interview 12a)

Several participants described an expectation of vet school as cliquey. One expected fellow students to be posh, and expected that they would not fit in because they came from a working class background:

“I think my expectation is I was really scared because I thought maybe there's a certain type of person that, or a certain group, and I'm so different because I didn't apply straight from school [...] and also people had told me it can be quite cliquey and, you know, different friends groups and everything. And there will maybe be loads of posh people or something, and you know, that kind of thing [...] [I] just thought it'll be a real bunch of intelligent people, will I fit into that, you know, be able to keep up with them and they'll all be so young.”

(Interview 17a)

Some of these expectations were not met; some participants found that fitting in and feeling part of the group was easier than they had expected:

“But I think there's just a really... Then after coming it's like such a mixed group of people, you know what I mean, and everyone's like... I think it's like anywhere, you know, you get wee cliques or something but it's not like the big scary thing that I thought it would be.”

(Interview 17a)

#### 5.4.4 Hard work

Just as hard work was a value identified as part of veterinary identity in Chapter 6, it was also an expectation that students reported of their time at vet school. This raises questions as to whether some aspects of veterinary identity are affected by expectations formed prior to entering vet school, and is explored further in Chapter 6.

One participant described this in an animated way:

Interviewer: Did you have any expectations of vet school before you came?

Participant: Other than they were going to beat us senseless?

Interviewer: Did you think that before you came?

Participant: Well we're always told it's hard to get into and... Well I guess you either do or you don't.

Interviewer: Who is it who tells you that? Is it like teachers or family..?

Participant: I think it's just the world.

(Interview 30a)

Another participant described that even though they had expected hard work, this expectation had been surpassed with "constant work":

"It was what I expected. I kind of, I was expecting to have to work quite a lot. I just, I think as I've gone through the years, the amount I've had to put in has just like taken everything, so I've just like not enjoyed... [...] It's always been quite intense and I've failed stuff every year, so I haven't kind of had a break [...] It's just been three and a half years of constant work."

(Interview 07a)



This sense of constant work or constant expectation or pressure to work acted as a barrier to accessing social or instrumental support for some participants but not for others. Students who found study more difficult and had to resit examinations struggled particularly with accessing emotional and instrumental support.

## **5.5 Experience of veterinary study**

Participants' experience of veterinary study was explored through several questions in the first and second rounds of interviews. The first round of interviews was performed while students were partway through their final year of university, the second round shortly after graduation.

Experiences of vet school reported retrospectively shortly after graduating were largely more positive than those reported during the first round interviews at vet school. Four subthemes were generated from these data: stress, social aspects of veterinary study, experiences of study, and professionalism. These are addressed in turn.

### **5.5.1 Stress**

Stress was the most commonly reported experience in the study. Most students who experienced stress attributed this to vet school. Students' experiences of stress and the interaction with their training and their course are discussed in detail in Chapter 4.

### **5.5.2 Social aspects of veterinary study**

Students described a range of social experiences at university impacting their experience of vet school. Vet school was described by some as "tight-knit", a place where people had made close confiding friendships:

"I'm going to miss it. I think it's quite a nice tight-knit community [...] I've got some friends here who I hope I will never lose."

(Interview 04a)

However others described vet school as a less friendly environment, where a few had experiences they likened to people being “catty”, and “competitive”:

Participant: Vet school is very American high school in nature [...] like the cliques and the backstabbing and the talking down about people, it's a microcosm.

Interviewer: Do you find that goes on?

Participant: Yeah I'm sure all the people you speak to will say the same thing it's just it's incredibly catty [...] you are putting 160 people, all very driven, all very controlling, very intelligent, all big fish in small ponds and now we're all together and now we're all big fish in small pond [sic] and that's a lot of big fish together, and it's just everyone wants to bring each other down I feel, like, most people, there are always exceptions, but it's a weird environment. I've never experienced anything like this.

(Interview 01a)

This competition was suggested as an effect on personal wellbeing:

“And it's so competitive, it's like as soon as a grade comes out, everyone, they are saying: What did you get? What did you get? I mean I am very competitive, I mean, I think that's part of it, the people who are attracted to this career are all very competitive so when, I, it was a struggle to see my grades not match up to where I always imagined”

(Interview 01a)

Another described difficulties in team dynamics during group work in final clinical years of study:

“Just we're all type A personalities, over-achievers and... It wasn't until I got here that I realised that some of the people here can be really cut-throat, and you just think ‘why?’ We're all playing for the same team! Does it matter who says ‘this is the diagnosis’ at the very end? So long as you've all helped. [...] We had one this week

actually where – I won't say names – but one of the students said they were going to take a case and then didn't turn up. But then turned around and says 'oh I delegated it to someone else' basically and then that person had no idea. So that person got into trouble for not turning up when it was the other person who'd said they were going to do it."

(Interview 03a)

Another characterised it as "bitchy" and that other students looked to find fault and blame:

"At vet school it's horrendously bitchy [...] oh there's a rumour that one of the animals just, one of the animals in the hospital died because it was accidentally overdosed and then everyone was like 'oh, it must be an [particular group] student, who was on [particular group] at the time? Oh there's these five students, oh it was..."

(Interview 06a)

Social interactions were complex, as one would expect. Most participants described having close friends at vet school, but many also described reticence in talking to vet school friends about problems. This sense of competitiveness and class dynamics inhibited emotional support from peers and left many participants primarily using family rather than peers for emotional support.

### **5.5.3 Experiences of study**

Experiences of study were varied and tended to be more positive when reported retrospectively in second and third round interviews following study rather than in the first round interviews during vet school. The effect of hindsight here is interesting and was relevant later too: participants' conceptualisations of the support they received in their first job had changed several years after the time they experienced it. This highlights the usefulness of a prospective design for this study.

Many participants said they had enjoyed vet school but a number of difficulties were raised when discussing veterinary study. Some said they would not study veterinary medicine if offered the choice again. For some participants this was the case even during the first set of interviews conducted during study.

Difficult experiences and consequences of study described by participants included impact on family life, impact on health, impact on sleep, stress, difficulties with work-life balance, and contact with tutors. Experience of contact with tutors was variable, with some describing extremely supportive tutor relationships, and others describing more difficult interactions where they felt let down or not known. Experiences of study included experiences during EMS placements in animal settings and veterinary workplaces. These were again variable and included feeling shamed by clinicians they had been working with, coming across what they considered to be inadequate standards of animal welfare, and feeling bullied and harassed. A participant talked about an experience when seeing practice:

“Like there’s been places where we get ignored, where kind of the vets, I can remember there was one practice, like there was two doors into the consult room [...] You’d be like waiting to go into the consult and they’d choose the other door to kind of... [...] So you were left behind. So then you would miss the consult and they’d just be kind of avoiding you. [...] Or, you know, when you ask questions you just feel like they don’t have time to answer them sometimes. [...] I remember I had this one vet who would be, you know, would just you’d be asking questions and he’d just be giving you silly answers. Like ‘oh because I want to, because this is why I do that’ [...] But just kind of really not approachable and not wanting to help. And I think he thought he was amazing in his field, you know what I mean, and just really didn’t have time for the students anymore. No matter, I think, no matter how enthusiastic or polite or what you wanted to do, they just... [...] It kind of makes you feel really rubbish!”

(Interview 17a)

In contrast, some students had extremely positive experiences of veterinary study and of EMS placements. Several participants went on to work in practices where they had had positive experiences of seeing practice as undergraduates. Students who went on to work at practices where they had seen practice prior to graduation generally had support that was more likely to meet their needs than students who went on to work at practices where they had not seen practice.

#### 5.5.4 Professionalism

Within the theme of professionalism, ethical dilemmas featured strongly, with participants talking about how they negotiated these during veterinary study. Several participants mentioned the challenge of reconciling what they wanted and were able to do for animals they were caring for, with what owners were able to pay. This was described in the context of having had a negative impact on wellbeing.

Specialist and referral medicine was also raised as something that was experienced as a “shock” by several participants:

“The only thing I wasn’t aware of was the referral side of things, and how far they \*can\* [emphasis] push things. And I found it quite a shock, so going over there and seeing some of the animals that I would have thought would have been put to sleep elsewhere, but they sort of prolong the life and try and keep it... Obviously they’re trying to do the best for them, but sometimes we see the suffering side of it [...] I went to a different referral centre because I thought initially that I’d like small animal medicine and maybe think about doing sort of small animal medicine. And it’s the same there.”

(Interview 09c)

Sometimes ethical dilemmas involved students taking actions they did not want to:

“When I was on EMS we were at a practice where they were castrating calves, but it was like the practice owner’s kind of standard protocol, like he didn’t use

local anaesthetic because he felt it was more barbaric to inject with local. He felt they reacted more with that than they did to the scalpel. So like when they offered me a chance I kind of, I'd never castrated a calf before so I did it, but again I kind of felt a bit of a conflict that ideally I would like them to use local."

(Interview 16a)

Some of the reactions and impacts on participants from these situations seemed to contribute to feelings similar to those described as moral distress in medical education literature. Moral distress - knowing what action one wants to take but being prevented from doing so by an external factor (Jameton, 1984) - is explored in Chapter 7.

Variable ethical and welfare standards when seeing practice in EMS placements at clinics outside university as part of their training was a common subtheme. These impacted individual wellbeing, as described by a student discussing the euthanasia of a cat with which they had assisted:

"I've had a few times where people have just been like horrible [...] One day that stands out in my mind that I found really upsetting [...] This one vet in the practice, I think she had something personal going on, but was really taking it out on me at very kind of, you know, chance she could get. And we had a cat that came in and it was an old cat and it was diabetic and the owner wanted it put to sleep, which you can understand, like it's a sad option but it is an option. And it wasn't so much that, it was like just asking her 'oh yes, why', you know, and just her answers making me feel like an idiot, you know. And then the way she treated the cat as well, like, scruffed it to the table, you know, wasn't very compassionate about the cat, was kind of in a rush to put it to sleep. [...] And like I'm really much a cat person and how you handle them and I was just like 'this is this cat's last minutes, it's really sad' and I just remember her saying 'you have to really pin it hard to the table as I do this' and feeling really uncomfortable, you know, and being in that situation to whether I should just be like, should I just walk away from this situation or will they... And I remember going home crying..."

(Interview 17a)

This impact of ethical dilemmas on wellbeing is explored further in Chapters 6 and 7.

There were positive experiences described in the experience of veterinary study. Graduation was described by most participants as a happy event:

“Graduated, and that was like the best weekend of my life.”

(Interview 16b)

Descriptions of happiness around graduation included achievement, pride, realising personal and family ambitions, and a chance to move on:

“I was extremely happy. I know some people were really sad to leave but I felt like it was the perfect ending. I spent the whole day with my friends and it was a beautiful day and you felt like... I don't know, I felt ready to move on. When you talked to people and they were sad, I would sort of say, like 'well do you really want to turn up back at vet school on Monday morning?' and they were like 'oh god no' and I was like 'well yes it's the people you're going to miss, maybe you'll miss the work, I don't know, but...' [...] And I think because I didn't know exactly where I was going, it was almost like an adventure, like I knew the start and where I was going to take off kind of a thing so..”

(Interview 14b)

Some participants described mixed feelings, one describing it as anticlimactic, and another saying it “didn't feel real”:

Interviewer: And how was graduation?

Participant: Yes, really good! All I can remember really is thinking, you know, yes this is really nice and everything, but it didn't feel real, you know? [...] I know a lot of my friends were kind of crying and like saying their goodbyes and things and I just, you know, I never sort of felt any kind of emotion, like it just hadn't sunk in.

(Interview 11b)

## 5.6 Expectations of veterinary work

The first and second rounds of interviews, conducted during the final year of study and the first few months following graduation, explored participants' expectations of veterinary work. These were further discussed at the third round of interviews, 19-27 months following graduation when all participants had some experience of veterinary workplaces.

Expectations of veterinary work focussed on participants' ideas about new graduate life and work. Themes generated from analysis of participant accounts were similar to their experiences during the final year of study, indicating perhaps how important final year of study was in forming expectations of new graduate life. They included six subthemes: excitement, stress, responsibility, hopes for support, long hours, and ethical dilemmas. These themes are examined in turn.

### 5.6.1 Excitement

Several participants described being excited when anticipating the transition to practice. There was a sense of finally being able to do something they had worked so hard for:

“But I’m always, I don’t know, open and quite excited about the feeling of new things, unexpected things, being put under pressure.”

(Interview 02a)

This excitement and expectation for some balanced concerns about stress or difficulty:

“Everyone said it’s like one of the toughest years and it’s going to be really hard and a really steep learning curve. Which I’m quite excited about as well, like getting that chance to learn everything. But I think there will be some ups and downs, like I really expect that, to some days just be exhausted and crying! And some days feeling really happy, like as it’s going on, like ‘oh I can do this’ and everything.”



(Interview 17a)

### 5.6.2 Stress

The majority of participants anticipated that new graduate life would be stressful, that it would involve long working hours, and might negatively impact their wellbeing. Participants' expectations of stress were developed through contact with friends who had graduated before them. These included anticipated hours of work and expectations of inadequate support. Several participants referred to "horror stories" which had been told to them about both vet school and the transition to practice:

"They think that 'oh it'll be great, you know, the on call won't be that bad, the pay won't be that bad', when in reality, just because I've got friends that have graduated, it is! Obviously not for every case, but for the majority of them."

(Interview 07a)

Participant: I suppose it's whether you're going to be supported, like I've heard some horror stories.

Interviewer: OK. Where do you hear those from? Who tells you them?

Participant: Graduates from last year. Vets that you speak to. Because especially when they find out you're in final year...

(Interview 20a)

Expectations of stress were sometimes included with what was perceived by most – but not all - as poor salary, and difficulty in reconciling public expectation of veterinary work with what was possible within the constraints of client funds and other factors. This overlap with moral distress is explored further in Chapter 7.

### 5.6.3 Responsibility

Responsibility and a “jump” from student responsibility to “being on my own” was a significant concern. Anxiety about performing surgery unsupported was common. There was a widespread expectation among participants that this stress would decrease after 1-2 years in practice, and that there would then be a sense of achievement and competency:

“It will be stressful, I’m sure it will be very stressful, I have no doubts about that, but I think that after one or two years I’ll hopefully settle into more of a routine and hopefully some relaxation, more ‘I can do this’.”

(Interview 01a)

Responsibility for cases and for life and death decisions was discussed by several participants anticipating the transition to practice in first round interviews, and during transition in second round interviews. Some described other areas of responsibility as part of their expectations of work:

“I think sometimes just because I was a bit naïve, just some of the legislation and stuff took me a bit by surprise, and quite how much responsibility you actually take on as a professional [...] Just sort of how much you’re actually liable for, as a vet surgeon, the fact that you are responsible for the team. And that doesn’t always come across until you start seeing practice as a vet student, and you start discussing it. Which, when you’re thirteen or fourteen [years old] you just go out with a vet and have a great time! [...] It does make me nervous because it’s a litigious culture. But I think you just have to face it.”

(Interview 04a)

Awareness of responsibility was described by some participants as a point at which their expectation of veterinary work changed from excitement:

“I think you see it as really exciting, like when... The main thing is when you realise that you’re responsible, which does shift onto us now obviously, you just think ‘oh Christ’, like I’d almost rather, it’s not that you’d rather you weren’t doing it but you don’t see it in the

same starry-eyed way that you saw it when you were younger.”

(Interview 14a)

Stress associated with responsibility was almost seen as a rite of passage in “becoming” a vet, but although it was expected, it was not seen as inevitable by all; there was a sense of hoped-for support which could ameliorate it.

#### **5.6.4 Hopes for support**

All participants in the study talked about how a supportive first job was important to them when asked what mattered to them in their first job after graduation, but there was uncertainty about how to find this support, and also what form this support might take.

#### **5.6.5 Long hours**

Long working hours were a common expectation of new graduate life. There was a sense that these were part of the job:

“It’s really been drilled into us to expect a really poor wage and really long hours and like maybe having to travel to anywhere in the country to get a job. [...] I wasn’t expecting that. I was... I thought, and I think it probably will be in the end, that it will be sort of an averagely sort of well-paid job, like it will be alright, you’ll be able to go on holiday once a year and have an alright lifestyle without being like super-rich. But I had no concept of the idea that there’s jobs out there where they expect you to be in from like eight ’til seven every day and every third weekend.”

(Interview 12a)

For some participants there was a sense of long hours being a rite of passage to becoming a vet, and that these long hours would decrease when other new graduates came after them:

Some new graduate roles were expected to be busy and difficult and tiring, but still anticipated as being worthwhile as a “jump start” to the rest of career:

Interviewer: What do you expect your first job to be like?

Participant: Very, very busy [...] and like tired. One of my friends from last year is an intern there at the moment and she was like ‘oh I think you should definitely...’ – she really loves it – ‘oh, you should definitely come down and see’. I think it will be really tiring, not much money, so... But I guess it’s something you’re doing to get to where you want to be in, say, two years’ time, to get that jump-start to...

(Interview 15b)

The expectations of new graduate work involving long hours were linked to expectations of it being stressful, along with a feared lack of support, workload and the level of responsibility.

### **5.6.6 Ethical dilemmas**

Students talked about ethical dilemmas they had faced during training and how these had influenced and shaped their expectations of practice. These often focussed around client costs and ability to pay for veterinary care, but also included a developing awareness of differences between paradigms for understanding animal health.

“The whole client interaction, that’s completely different to what I’d thought [...] I think there’s going to be a lot more frustrations in practice than what I’d appreciated [...] Just clients’ wishes for non-scientific reason, like for example I’m on equine just now and we’d gone out to a case where a horse had had an abscess, so the vet had told the owner ‘oh I’ll put a poultice on it and we’ll come back and see it on Monday’ and he came back on Monday and the yard owner had taken the poultice off. [...] I just found it really frustrating that this poor owner was paying for our services and we had a scientific backup but she was then taking advice off someone who didn’t really have any knowledge and didn’t, in my

opinion, have any right to then do that to her animal [...] But that's kind of the restrictions that we're up against, so like financial restrictions and people's own opinions and what they hear from other people."

(Interview 16a)

Influences of ethical dilemmas on shaping expectations were important, but students did not describe support for these at university. They were something participants mostly seemed to expect to deal with alone.

## **5.7 Experiences of veterinary work**

Participants' experiences of veterinary work were gathered during the second and third round interviews, a few months and then 19-27 months after graduation. Six subthemes were generated from analysis of these experiences of veterinary work: shock, support, employment practices, gender, contributing, impact on health, and client interactions. Each subtheme is examined in turn.

### **5.7.1 Shock**

Shock was described by several participants after transition to veterinary work following graduation. This was despite the majority of participants expecting stressful work and long hours. This participant, on their third interview, at 19 months after graduation:

"It's just a bit of a shock, to be starting and then, yes, just the really long days and, yes... it has been quite tough."

(Interview 09c)

This sense of shock is interesting in the context of the literature on graduate transitions. Whilst Milligan (2013) describes three types of leaning styles at induction and how these can be used for appropriate support at graduate transition in a different industry: formal learning, learning through social

interaction and through work based opportunities. In this study, despite elements of the three types of learning being present in veterinary training, participants still experienced shock at transition. This is perhaps surprising, given the requirement in veterinary training for 38 weeks' EMS experience in veterinary workplaces before graduation. However, although veterinary education at university may strive to provide this learning opportunity, the workplace induction described by Milligan was not consistent in this study and varied dramatically depending on the individual participant's circumstances and their workplace.

### 5.7.2 Support

There was an interaction between the subthemes of shock and support: a number of participants described being surprised, let down, or shocked that the support which they received was not what they had expected or had been promised:

“So I was hired by one of the large corporate vet groups, and I think they said everything that I wanted to hear in the interview stage. So they said there'd be a lot of mentorship, that there'd be a lot of help, and that they'd kind of ease you into kind of handling your own cases and there'd be a lot of support and all of that. And I think I just found that it definitely, definitely, was not the case. And I think the expectation from most practices is that you work nine to eight or similar. [...] I think the expectation is an eleven hour day, with one hour for lunch. But where I started every single second of your time was scheduled, except for the one hour you had for lunch, which meant that you had to do all your paperwork, all your call-backs, all your reporting of blood results, you know, checking up on patients, in that hour, which you weren't paid for.”

(Interview 21c)

Another participant described feeling “cheated” when promised support didn't happen:

Participant: My first job lasted three months, so it wasn't a great start to my career really.

Interviewer: Oh, what happened?

Participant: What happened? [They] Put me into full-time too quickly, the support was dropped within a couple of weeks [...] Well yes, talk is cheap isn't it? [...] They can promise so much but then they can, you know, do something totally different. That's what I found with this second job as well really [...] I ended up just going to books and what have you. It wasn't great to be honest with you.

Interviewer: No. And how did that affect you when it wasn't what they'd said it would be?

Participant: Well you feel a bit cheated because then, you know, there's only so much you can do. You can dwell on the negatives or you can kind of find the positives and you kind of have to use your own initiative to kind of get on with things, so just find out from books, other colleagues and what have you. Even mates...

(Interview 02c)

The sense of feeling let down when promised support did not happen is explored in more detail later in this chapter. The support which they felt they had been promised but which had not been provided was largely instrumental support, but there were accounts of the impact of emotional support being missing in some workplaces as well, suggesting that participants looked for both types of social support during transition.

### **5.7.3 Employment practices**

Employment practices affected new graduates experience of transition to practice. The majority of participants in the study did not stay in their first job for more than a year. Most were in their second job at the time of the third round interviews, some in their third veterinary job, and one in their fourth. A number of participants stayed for 3 months or fewer in their first job. This

rapid transition between is consistent with the changing nature of work described by Savickas and other authors, with pressures relating to globalisation and wider labour market issues influencing employment practices (Savickas et al., 2009). However, specific veterinary labour market issues, culture and standards of management were also implicated as possible factors.

Several participants were let go during probationary periods, with one observing this as a regular feature where they worked.

Participant: Well I'd like to say I've been working but I've actually been out of work more than I've actually been in work at this point.

Interviewer: Right. And was that through choice or not through choice?

Participant: Mmm, well, one bad job... Well, the first job I ended up in, it turned out, they were burning through new grads.

Interviewer: Right, and did you know that before or it just kind of you found out once you were there?

Participant: Found out afterwards. So what they were doing was taking people on for three months and then just binning them.

Interviewer: Really? So they were getting rid of them after their sort of trial period or..?

Participant: Yes, and just saying to everyone "oh you're not good enough" [...] They've been through nine [...] [in] a year and a half.

(Interview 30c)

The participant described also having been asked to leave after their probationary period, how this left them feeling "shocked", and that it was "appalling".



Others talked about more supportive experiences including what was described as “excellent” support, which is discussed later in this chapter.

Other employment practices affected new graduate’s experiences of transition. Workplace surveillance for client charging was an issue mentioned by several graduates, including trackers in cars and surveillance of prescribing to meet targets while they were consulting. Both of the participants described this as having a negative impact on their wellbeing.

“So they had trackers in the cars so, you know, we would charge a time that we felt was appropriate, if we’d been there for half an hour and we’d had a fifteen minute coffee break or whatever, but [...] you know, the head office would change the times and they would say ‘oh your tracker was there for forty-five minutes and you’ve only charged half an hour’. And there wasn’t really a discussion, you know, so if they’d phoned up you could have said that fifteen minutes of that time wasn’t chargeable because I wasn’t doing any work, so you were going over and above and I just thought, you know, the vet would promise the client one thing but then head office would do another thing that wasn’t linked.”

(Interview 16c)

Aspects of working conditions that were described as good for wellbeing were supportive colleagues, development, and sense of having contributed.

#### **5.7.4 Gender discrimination**

Gender discrimination was raised by a number of participants in the study even though it was not part of the interview schedule, and it was subsequently developed as a theme. During the course of this study, evidence of gender discrimination in the veterinary profession has increased. There is a striking gender pay gap: senior male vets are paid 36% more than senior female vets (SPVS, 2018, Waters, 2018). Several studies have reported that despite a predominantly female workforce (BVA/RCVS, 2014), gender discrimination is common, with women underrepresented in senior

roles (2003). Yet beliefs about gender discrimination suggest 44% of managers and employers do not think gender discrimination is a problem, further emphasising a lack of awareness of gender issues in veterinary employment (Begeny and BVA, 2018). Further emphasising the problem, concerns have been raised that reports of gender discrimination are undermined and dismissed (Dos Santos, 2019). Knights and Clarke (Knights and Clarke, 2019) found evidence of stereotypical assumptions, gendered organisation of work and gender mismanagement. Outside the veterinary profession, gender discrimination in the workplace is associated with poor mental health for women and almost certainly for transgender people, and gender-based harassment is associated with poor physical health (Harnois and Bastos, 2018).

In the Veterinary Transition Study, evidence of the effect of perceived gender discrimination first arose during veterinary training, even before the transition to veterinary work. A student described how they felt that women were “anonymous”, while men were known by name by clinicians on university clinical teaching placements:

Participant: It's definitely a very negative atmosphere I think, and students aren't treated well I don't think, we're not, we're anonymous. They have a hundred and sixty students, we are all dressed the same, how can you be personal?

Interviewer: You don't think that you're known, or you have your own identity?

Participant: No, they know all the boys names, it's like oh [name of male student], and the four girls, which is hard, but it's understandable, I completely understand it so I never hold that against them, but it's just the fact of the matter

(Interview 01a)

Once in practice the issue of the gender pay gap was raised as something that had been observed among peers:

Participant: But I earn more than all my female friends so I can't really complain, but then the three boys that I knew quite well at uni all came out on sort of £5000 more than the rest of us. [...]

Interviewer: And do you know if that was a gender thing, as far as you know?

Participant: I think so, I think it must have been. Because, well two of them were sort of distinction students that did really well and one of them failed every exam he ever took and he actually got the highest wage of the three and managed to get a job in [a desirable area], so I think it must have... I think people assume that a man will work for the, you know, I think they try and work out how little they can pay you, but they assume a man's going to want more.

(Interview 12c)

Male participants also observed gender inequality in the profession:

Participant: Yes, I feel like a vet now. I think, you know, one of the things that surprised me when I started working was the amount of respect and authority people gave me. You know, once clients, they just automatically accepted that I knew what I was doing, so, I have to be honest, I wonder how much of that is because of my gender.

Interviewer: Right, OK. Do you mean you think they trust men more or..?

Participant: I think so, I really do, because I have colleagues that graduated with me and work at the same practice and they didn't get the same amount of respect from the clients. [...] I felt that way. I don't know how my colleagues felt because I've never actually talked to them about it.

(Interview 35c)

The impact of gender discrimination and experiences of gender inequality in the veterinary profession warrants further investigation.

### 5.7.5 Contributing

A sense of having contributed was important to several participants. This was especially important when participants were in their second or third veterinary jobs and were able to contrast previous working environments with ones that had been better subsequently. This participant, on describing their second veterinary job:

Participant: I'm liking it a lot more.

Interviewer: What do you enjoy about it?

Participant: It's more relaxed.

Interviewer: Is it the vet work, or is it the practice or both or..?

Participant: It's the practice, it's working with people, everyone works very well together as a team. Whereas at my previous clinic it was kind of like we'd have nightshift and we'd have dayshift and dayshift was always complaining about nightshift and nightshift was always complaining that dayshift didn't do enough. It was kind of like a battle and so here everyone is working really nicely together. [...] I have a lot of support, you know, practically, like medically, from the owner. And I also get to relax when I go home, spend time with people that I love, not just go home and go to bed, and repeating.

(Interview 18c)

Going on to ask about what they had enjoyed the most, again the team and a sense of contributing were important:

Interviewer: Thinking back over the whole eighteen months that you've been working, what's been the thing that you've enjoyed most?

Participant: I've always loved working with animal medicine, my big thing, and just getting to go to work

and working with amazing people. [...] I like working as a team to provide kind of a good experience for people and animals. When the team works together you can feel it, I feel like the clientele can really feel it. [...] It's kind of they're meshed into the community. [...] And that just feels really good when I can contribute something. And they can see you for something more than... [...] I don't know, they see you as human beings.

(Interview 18c)

The role of meaning in work and its impact on stress, frustration, job satisfaction, and health has been discussed for many years (Frankl, 1969, Frankl, 2000, Lucas, 1984, Nahapiet and Ghoshal, 1998, Read and Laschinger, 2015, Lee et al., 2017). The role of meaning in work and the impact on health is discussed in Chapter 7 of this study.

#### **5.7.6 Impact on health**

Participants described ways that their work had impacted on their health whilst working as a new graduate. This included both impacts on mental health described in Chapter 4 and impacts on physical health. Two participants described serious incidents where they suffered injury at work during their first year in practice:

“At one point I got laid out flat on my back by a horse and it kicked me in the side of the knee and [...] I called into [the vet practice] reception and said ‘look, I’m pretty much right next to the hospital so I’ll get this checked out’ and they said ‘are you sure?’ and it was like ‘are you pretty much telling me I can’t go to hospital?’”

(Interview 30c)

The participant described having to return to work the same day after being assessed at hospital, and feeling under pressure to do so from their workplace.

Another described a potentially life-threatening incident

Participant: It all culminated in one afternoon and evening where I was on call [...] I went out to see a horse that had fallen in the field earlier on that day [...] I gave it a [painkiller] injection and the plan was to leave it with some oral bute [painkiller] over the weekend and unfortunately it had a [drug] reaction [...] And seven hundred plus kilos of Irish sport horse fell on top of me.

Interviewer: Oh no!

Participant: It went down as if I'd given it [sedation], it just... I couldn't get out from underneath it and it still had the catheter in and it leaked everywhere.

Interviewer: Oh my goodness.

Participant: The horses in the adjacent boxes kicked off and the owner started screaming, the kids started crying, there were dogs barking everywhere, and I just was underneath this horse while it was thrashing to get back up again and I just... I managed to get out but not without a few scrapes and bruises.

(Interview 03c)

In this case, on asking for support following the incident, the new graduate described support not being available:

"I called my second on call and he didn't answer his phone and I called my boss and he didn't answer his phone either. And when I called back to the practice I got one of the nurses and I said 'look, I need someone to come out here and I need somebody to come out now' – I'd only been qualified for 2 months at that point. And she said 'oh, being sort of 6.50, all the vets have gone home, there's no-one here, you're going to have to keep trying your second on call and just deal with it on your own' [...] And I mean it was awful. [...] I was an absolute nervous wreck at this point."

(Interview 03c)

The new graduate then described how the second on call arrived to help some time later, but then they had to carry on working:

“And I had to carry on being on call. And I got through it, thankfully, but when I got in for work the next day one of the other vets that I got on OK with, she came and asked me if I was alright, and I said ‘yes, it was terrifying, I had no idea what to do.’ And she said ‘if I’d known I’d have come out, I was sitting next to the nurse who told you no-one was here.’

(Interview 03c)

This sense of both emotional and instrumental support being denied almost as an effort to teach new graduates was suggested by other participants too. This barrier to social support had various negative consequences for participant health, and for future support behaviour. I previously discussed how the prospective cohort nature of this study reflected that participants’ accounts sometimes changed in emphasis about experiences from one interview close to an event to another some time later. One way this was seen was participants’ experiences of being denied social support at transition. While this had a profoundly negative impact on them at the time, by the time of the third round interviews at 19-27 months after graduation a few participants who felt they had transitioned beyond being a new graduate now had support for other new graduates as part of their role. They had reframed experiences of being denied support as something they had learned from, and indeed were starting to repeat with more recent graduates and students seeing practice with them. This maintenance of practices where access to support was inhibited or blocked is concerning.

### **5.7.7 Client interactions**

Client interactions were described as being aspects of both good and less good experiences of transition, with a wide variety of impacts on participants.

## **5.8 Support at University**

### **5.8.1 Expectation of support**

Expectations of support were similar among study participants. All participants felt that support was important, and during first round interviews suggested unprompted that it was a priority in their first job.

However even while still at vet school many participants had low expectations of the support they would receive after graduation. This was the case for both instrumental and emotional support, though participants' focus at this stage was around instrumental support in their first job. This analysis of themes around support in this study looks at participants' experiences of support at university and support in the workplace.

### **5.8.2 Support at university**

Participants spoke about support at university primarily in the first round of interviews during their final year of veterinary study but also in the second round of interviews just following graduation. Analysis of participants' accounts around support generated three subthemes: experience of support, attitudes to support, and barriers and enablers to support.

#### **5.8.2.1 Experience of support**

The most commonly used or cited social support during university was emotional support, and was from "home" and friends. Home was usually parents, guardians, or grandparents, with whom most students were not living during term time. For students who were married or cohabiting, spouses or long-term partners were also referred to in this way, as were some siblings.

"I think a mixture of friends and family. Like I'm really close to my parents, I do call them a lot if I'm having a rubbish day."

(Interview 22a)



“Well I’m very close to my family and so I’d definitely go to my family, and I have, I don’t have a lot of friends but I have a tight, small group of friends and I go to them as well.”

(Interview 20a)

Friends were an equally common source of emotional support:

“It’s, I’d say, friends and family foremost. I can’t remember a time I’ve used any [vet] school resources.”

(Interview 26a)

Many participants differentiated vet student friends from other friends at university or friends from home or elsewhere:

“Sometimes it’s nice to have a vet friend that kind of understands the situation and equally it’s nice to have someone that you can just rant about something and they won’t know about it.”

(Interview 22a)

For emotional support a number of students had a preference for friends from non-vet courses at university or friends from home, rather than vet student friends. This was explained as being due to a different perspective:

“I think if you’ve got, you know, if you’re struggling with something that maybe your other vet friends aren’t, it’s easier to talk to somebody who’s got maybe a different perspective on it, because it can get to be a little bit like cliquey, vet school, and I think to talk to somebody who, you know, one of my best friends was like an English language student, the other one was doing Spanish, and I think, to them, vet school seems like completely removed from them who were in uni maybe twelve hours a week. They help me see the funny side of things I think.”

(Interview 12a)

There was less competition with non-vet student friends, and also a sense that vet student friends would be experiencing the same issues:

“I’m really close to my parents, I do call them a lot if I’m having a rubbish day. And especially because a lot of my friends are vets, sometimes you don’t want to take things... they’ve got the same issues as you, so you don’t want to sit and rant about your bad day, because they’ve probably done the same, so I talk to my parents a lot because they’re sort of out of the vet world [...] sometimes, say if you’re stressed about exams, you don’t really want to go and tell your friend who’s also doing exams, because they’ve got the same issues [...] So then I’ll sort of rant to my parents about how much I hate exams, or my non-vet friends or something.”

(Interview 26a)

However this varied, with some citing vet friends as particularly supportive:

“I think before final year it was kind of friends, my family. And final year I’ve got such a good rotation group, they’ve been like the best [...] they’re kind of my new go-to people.”

(Interview 29a)

And for some this included emotional support from vet friends:

“In our small final year group we’re actually too good at sharing things with each other, which is great, I love to know when people are honest, and I’m honest with people and I’ll tell them when I’m worried, or struggling.”

(Interview 10a)

There was a sense however even from people who found emotional support from vet student friends helpful themselves that this support might not be universal for all students, with one participant also describing having observed students not sharing cases, or behaving in a way they considered “arsey” on clinics. This complexity in experiences of support highlights the variability in students’ experiences of emotional support:

“We share cases and we’ll discuss and like ‘oh what have you kind of, what have you not done, what would you like to gain more experience in?’ ‘Oh I’ve done this, so it’s fair enough to give that to another person’,

whereas other ones, other groups kind of individuals will kind of sneakily look at the future animals that are coming in and then pick their ones without giving each other, the other ones, a kind of chance to look at the cases and kind of decide amongst themselves. And I guess, yes, I'm trying to... Even like if clinicians are asking questions and they'll be quite smart and arsey about it and... Yes, so... Whereas we're just having a laugh, which is nice."

(Interview 10a)

Support from friends and family was largely emotional but also instrumental in the form of practical and financial help, with financial help mostly coming from family:

"I live with like, I live in a five, we're all final year vet students, and they are my best friends and I get on with, we do a lot together. And I also speak to my parents as well, like they're quite supportive. They fund all my, like I don't have loans or anything, they pay for it all."

(Interview 15a)

Participants discussed other sources of emotional and instrumental during their time at university. These included personal tutors and other vet school staff, peer support service in the vet school, student counselling services at university, GPs, and mental health professionals via NHS mental health services. Experiences of these varied.

Some students felt that the vet school offered a lot of support:

"The vet school does great – I think they've got loads of support systems out there. And especially if you compared it to other courses, because I have friends on other courses and they don't receive half the, not even a quarter of the support that we get. And I've got sisters at different universities as well and one of them is doing medicine and it's very similar to vet, but one is doing engineering and for her to get meetings with tutors, she says it's a nightmare. But you can just email anyone here, so I'd just like to say that they clearly have listened, because I think they've done great."

(Interview 29a)

No student stated that they felt the vet school did not offer support, but a number of students said that they would not access the support that was there or that they did not find it helpful. This applied both to emotional support offered via tutors and support services and to instrumental support. This inhibition was more common for emotional support, with instrumental support in the form of study support being more commonly discussed as accessible.

Several participants in the study had used their Director of Studies or Personal Tutor and found them helpful for both instrumental and emotional support, one saying that they had been lifesaving, as discussed in Chapter 4. Others had a different experience, with some feeling not known by their Director of Studies. One student who had considered dropping out of university talked about trying to talk to their Director of Studies about it:

“I think I’ve mentioned it sometimes to my DoS [director of studies]. I’ve mentioned it before with my DoS. [...] she’s not always been the best. [...] I don’t particularly think she’s great [...] When I did speak to her about it she just said, referred me to someone else. She didn’t really want to speak about it.”

(Interview 20a)

A number of participants had accessed student counselling services at the university. Experiences of this service were mixed. One participant talked positively about being surprised at how short a time it took to be seen:

“I’ve used the counselling service, like now, that’s since December. And that’s pretty good actually. I thought it was going to be like a long waiting list because I’d always heard they’re quite bad for that kind of thing, but they actually got back to me like the next day and I had an appointment by like a few days’ time. So it is really good.”

(Interview 08a)

Another student who stated that they had depression spoke about trying to

access counselling but being turned away:

“I have used the university counselling service, which I found disappointing and unhelpful. [...] I went to them and they basically said ‘every student gets six free sessions and we don’t feel that we can help you in six, so go to your GP.’”

(Interview 21a)

When asked how this made them feel they explained that it had affected their attitude to future help-seeking:

“At the time you kind of feel like crap and you kind of feel like you’re very unimportant and very small and your problems are so insignificant that they’re not worth helping. And then for you to go and actually take the courage to ask them for help and they basically say that ‘we can’t help you’. You feel like, OK you’ve tried and it didn’t work so you’re not going to try any more. And [...] I had a list of numbers [from the counselling service] and I called them all and every single one was full, you know, for taking new patients and stuff, and I was sort of like ‘this is a sign that I am not meant to be helped with this’. So I certainly found it incredibly discouraging. [...] And there’s no follow-up either, like they don’t try to contact you to say ‘hey, these resources that we provided, did you manage to...’, like they just don’t... And so I felt, I don’t know, it was kind of useless.”

(Interview 21a)

Most participants seemed aware that a range of support services were available, even if they had not used or did not want to use them. However, one commented that it would have been helpful to be reminded of the support available:

“I think maybe this year [it would have helped to] be more aware of what support is out there. Because I think the way they introduced it to us was everything maybe the first week and we were just bombarded with everything from fire safety skills and whatever else to... It was just everything lumped into one week and so you’d get handed tonnes of pamphlets and forms and not really absorb much. So I think... I’m sure we were

told about counselling services but I think it was only later that they emphasised that you could go to your personal tutor and aside from those two, you know, just all the other resources. So I think if they were just emphasising that earlier on it would have been helpful.”

(Interview 28a)

Students who had accessed support via their GP, CMHT or hospital had had similarly mixed experiences.

#### **5.8.2.2 Attitudes to support**

Although most students were aware of support services beyond family and friends, most had not used healthcare or university services for support. Many participants said they associated the use of these with what they saw as more serious, major, or difficult problems. For some, not having accessed these supports was because they felt they had not needed to:

“Obviously you have your director of studies and I’ve only ever gone to them to sign off my portfolio, that sort of thing. But I’m not saying that I don’t think the support is there, I’m just saying I’ve never felt the need to go for it.”

(Interview 11a)

Some other students said they would access support if they felt they needed it:

“I’ll happily ring my mum and tell her everything! And my friends as well, we kind of like to moan together I suppose, usually. I’ve never really been through anything that needed any more sort of extra kind of... thought I needed any extra help from anybody. [...] But I think I would, if I had a big issue, I really don’t think I’d have a problem going to my personal tutor.”

(Interview 32a)

For some as part of this there was a sense of minimising their own problems:

“I think I haven’t really needed to and it’s maybe I didn’t want to because I felt like they were silly things or just wasn’t sure if it was an actual concern or whether it was just me complaining.”

(Interview 28a)

Seeking help was associated with “failure” for participants - either that they’d need to be considering dropping out of university or have failed a year to ask for help, or that they’d been seen as a failure if they did ask:

“Yes. I probably talk, like the person I would talk most to would be my boyfriend [...] and I speak to my gran every day so I would chat about how my day’s gone with her. So more like family, I’ve never gone to an advisory place, or really my DoS or anything like that. But I’ve never had any like massive problems, I’ve never really like failed things so I’ve never really felt like I needed a lot of help.”

(Interview 12a)

Others said they did not want to access support:

Interviewer: Have you ever used any university support kind of stuff?

Participant: No.

Interviewer: And would you if you have a problem? Do you think you would use them or not?

Participant: Probably not.

(Interview 15a)

Among the students who had not accessed support there were a range of attitudes to support. One student said they’d feel able to ask anyone within the vet school who could help:

“Anyone that you think can help really.”

(Interview 30a)

Others - including students who had experienced mental health conditions, suicide attempts and self-harm, and those considering dropping out from university - showed attitudes towards asking for help that may have been a barrier to accessing help. These included a view that people would be unable to help:

“Because I used to always think like talking doesn’t solve anything, what’s the point in it, was my attitude.”

(Interview 24a)

One student, when asked if they had spoken to anyone in the vet school about a mental health condition, said:

“There’s no need. They’re not going to do anything are they? I just kind of think ‘why bother someone else with something that they can’t do anything about?’ and it’s not going to, like, well what am I going to achieve from that? And it’s not something that I want to, you know, share, because it’s quite a secretive thing anyway, you don’t want to let everyone else know. That’s the last thing you kind of want to do.”

(Interview 08a)

They reflected that their view on this might be different when they were more well:

“I guess now I’m the other side of it it’s like I can see why it would be useful to tell someone but actually at the time you think ‘why am I going to tell anyone?’ it’s the one thing you don’t want to do, so...”

(Interview 08a)

Several participants expressed the view that because others were going through similar things they shouldn’t ask for help or seek support for them:

“I don’t feel like stressing because you’ve got too much work is that big a problem to take to, I don’t know, someone... Because I’m like, everyone’s in the same boat, everyone’s got the same amount of work so... I



know that's the impression you're not supposed to have but..."

(Interview 16a)

Some participants described not feeling that they were the "type of person" who would go for support, even when they were supportive of the idea of the various services available:

"There's been a lot of support, like there's that peer support and all that kind of stuff I know about, which is a good idea, but I don't think... I didn't ever use it and I'm not the type of person who would've gone to it."

(Interview 13a)

One student attributed this to personality:

"I think it's personality, but I haven't felt the need to seek out support like that."

(Interview 25a)

A common theme explored by a number of students was that things would have to be bad before they asked for help:

"Like all my problems are not so extreme that I would need an outside stranger."

(Interview 18a)

"Like I needed help sometimes but not professional help, do you see what I mean? Like it's not like a major, major problem."

(Interview 23a)

Another student suggested that the reason for not asking for help was in part not wanting people to know about their problems:

"And like, you know, you can talk to your DoS and stuff, in theory. [...] I think it would have had to be pretty bad

if I'd gone to speak to them, [...] Like a bit of you wouldn't want someone to know."

(Interview 13a)

They spoke about the importance of ongoing relationships for support:

"I'm maybe in a different situation because every year I've had a different DoS because they keep leaving, so I don't really know them too well, so it's kind of... I think maybe if you had the same one you kind of build up a relationship."

(Interview 13a)

They also described fears about the consequences of asking for help:

Participant: But I think there's definitely the feeling that, like a) what could they do about it, and b) if it was something big enough that they could do about it, I have a friend who, like it was totally her decision, but ended up going to her DoS and deciding to take a year out of vet school, which terrifies me! And even I know in my head that they didn't kick her off or anything but kind of discussed it and they agreed together that was the best thing, that just is really quite off-putting.

Interviewer: And what is it that scares you about that?

Participant: Being like a failure and explaining to your parents why. I don't think that would go down very well. And on a personal level, I kind of very nearly had to take a gap year before I came here and it was kind of under quite stressful circumstances and I was really proud of the fact that I managed to get here.

Interviewer: Right.

Participant: So I feel like if I opted to take a gap year or took a year out again, then it would kind of feel like all that work to get here, even though it wouldn't be wasted, there would kind of be a feeling of, you know...

(Interview 13a)

Other students described not wanting to burden others with their problems.

When asked whom they would approach if they needed support, one student replied:

“Pretty much nobody. It’s another thing I’ve recognised as I’ve got older, but I was very much, like friends would be like ‘oh, come and talk to me’, but I felt like I never wanted to talk to my friends because we’ve all got a lot on our plate with vet school as it is, and a lot of us have like different things going on that nobody else knows about, and I feel like I never wanted to burden my friends with my problems.”

(Interview 24a)

Another student described feelings of burdensomeness during a period of stress:

“I think I didn’t want to be a burden. I have really supportive family and friends and boyfriend, so I felt like I didn’t need more help than the support they could give me. And I think I was just quite determined to help myself. So I came out of it, and I think as a result of that it then made me really realise that, because I think it was just really stress-related and just taking, just thinking things were far bigger than they actually were and as a result I’m now quite like ‘oh well, shit happens’, kind of thing, and you’ve just got to move on.”

(Interview 33a)

The self-reliance discussed in the Chapter 4 influenced support seeking. One student described seeking some help at university after being injured and fracturing a bone:

“I went to my DoS and was like ‘I’ve broken this, it’s really hard to study, is there some sort of leeway or anything?’ but like nothing really... I’ve never really felt the need to go sort of thing, just... [...] I always just feel like I’m wasting their time! [...] But it was just, it’s not like they’re like ‘oh my god, why are you here?’ sort of thing, it’s just more that my own personal thing, it’s just like I feel like I’m inconveniencing people. [...] I generally have the opinion that people don’t, like you

don't need to know sort of thing [...] sort of figure things out myself and stuff."

(Interview 31a)

The range of reasons for reluctance to access help and support is explored further in Chapter 7.

### **5.8.2.3 Barriers and enablers**

Attitudes were important among the barriers and enablers to accessing support among participants whilst at university. Other barriers and enablers that participants talked about included relationships, with not being known being a barrier to help. One student described not feeling their director of studies and personal tutor knew who they were:

Interviewer: Looking back over your time here, is there any support that would've been useful that wasn't there, at any point? Is there anything that anyone could've done that would've been helpful?

Participant: Mmm... Don't know, probably like, for example, like having your personal tutor to actually know who you are!

Interviewer: Right, OK.

Participant: Because to be honest I'm pretty sure he doesn't know who I am. But it's kind of my fault because I didn't really actively seek help or anything, because I didn't really need professional help. But, yes, it's sometimes helpful... I guess like it's definitely different from high school when like your teachers really know who you are. But on such a large scale I guess it's really difficult for people to do that.

Interviewer: So have you only seen them for the sort of meetings and you..?

Participant: About once a year! When he signs my stuff.

Interviewer: And you don't think he really remembers you the rest of the time?

Participant: No. Definitely not.

(Interview 023a)

Given the importance of family and home in support, another barrier was geographic, but also linked to the structure of the vet course. A few participants who had resat exams discussed the impact of not being able to see family over the summer because they needed to stay at university for the resits. Some were still able to see family but it impacted the leisure time they could spend with them:

"My family are like 'oh we're going on holiday in so and so, would you want to come?' and I'm like 'I can't because I've got resits again'. [...] I think they just think that I'm being really antisocial! But I'm not!"

(Interview 07a)

This was also described other students who hadn't had resits but had EMS commitments during holidays:

"I guess the fact that you don't really have enough... well you don't really have enough time for that many holidays. You know, with all the EMS commitments [...] it sometimes limits how much you see family [...] like last summer I think it was, I only got half a week off."

(Interview 30a)

Others talked about physical barriers in the layout of accessing support services and concerns about being seen:

Interviewer: Have you used any of the support services in the uni at all?

Participant: No, I personally wouldn't use them. [...] I think, even just in the vet school itself, the little office thing is like right in the corridor on the open corridor, I don't know if anyone else has mentioned this?

Interviewer: No.

Participant: I was just like, well I don't think anyone would go to that if they were trying to subtly get support because it's like right in the middle!...

Interviewer: Is that having to walk in in front of everyone?

Participant: Yes.

(Interview 07a)

This student said that they worried about the service confidentiality, and this was a reason they wouldn't use it:

"I know it's supposed to be confidential, but..."

(Interview 07a)

In addition, they had a sense of passivity:

"I think I'm just one of these people that has to work hard and there's nothing anyone can really do about it. [...] especially the final year, I've been getting a lot of unsatisfactory feedback and a lot of, well some of the comments I've been getting are I'm not working hard enough and I could put a little bit more effort in, and I don't think they really realise that I am and I'm just not that exceptional a candidate."

(Interview 07a)

Students each having multiple reasons for not accessing support was not uncommon, and highlights the complexity of reasoning in reluctance to seek help, which is explored further in Chapter 7.

Enablers for accessing support included knowing people who had accessed support and had found this helpful:

Interviewer: Have you used any of the support services or..?

Participant: No, I haven't but the friend that's... Yes, she found great support in those. So, yes, I would definitely bear those in mind if I needed them, and recommend them as well because they certainly seemed very helpful, yes.

(Interview 10a)

Positive experiences of previous attempts to access support also acted as an enabler in asking for support in future:

"I've got a really nice group of friends who I went to playgroup, primary school and high school with. Like there's four of us still in that area. And also like my personal advisor [...] They've all really supported me through things that have happened. And I think everyone's really approachable and, [named several staff] they were here, and they were just all like, you know, they realise... You know when you've got an issue you just feel yourself like you're being weak and you can't cope with everything that's going on. But they're like, you know, they were so helpful to say like 'don't worry, you'll get through this and we'll help you sort it out.'"

(Interview 17a)

This participant mentioned four staff members who had helped them, and commented on how having a range of people available was important:

"So kind of it's really good to have the different kind of people to go to. And I think, you know, even if you've got a tutor at vet school who you wouldn't really go to, there's so many members of staff that try to help."

(Interview 17a)

They described again the difficulty of speaking about something being wrong, but also how a positive experience of accessing support made asking for help in future easier:

"I found it quite hard [to go to the tutor], and I think what I've learned from it as well is, like to start with I really didn't, you know, I didn't... I didn't really want to go and admit that something was wrong, because you just feel

like 'I'm here I should be able to cope with everything that's going on'. And then once I went it wasn't as bad as I thought and it was a relief and it was good to know that the support was there."

(Interview 17a)

The implications of these barriers and enablers are discussed further in Chapter 7.

## **5.9 Support at work**

Participants discussed support in the workplace at all three rounds of interviews. In the first round this was hoped-for or expected support. In the second round, for some who had already started work at the time of interviews shortly after graduation, this included their first experiences of workplace support. In the third round interviews conducted 19-27 months after graduation it was something discussed by all participants.

### **5.9.1 Expectation of support**

In the second round interviews just before starting in practice, many participants' expectations of support in practice focussed on support during surgery:

"I would hope that there would be a senior surgeon there, someone who could at least talk to me when I might be stumped or something. [...] Someone to, during my first few surgeries, be around just in case."

(Interview 35b).

They also talked about expectations of shadowing, confidence building, and support to avoid mistakes.

"If it was like minor procedures that I'm happy, that I've done before, that I'm happy with. But ideally it would be good to shadow someone for, you know, the first week or something, just to get a bit of confidence."



(Interview 07b)

There was a sense though that asking for support might look silly:

“I’m going to make sure when I go for my interview that the support is there because I’d rather look silly asking for it than make a big mistake. Because that’s what I’m worried about.”

(Interview 07b)

Even for new graduate vets who prioritised support in selecting their first job, there was a sense this might come with judgement. A new graduate vet talked about how support had influenced them to take a particular job:

Participant: Well I think on the initial advert [or] I think it was when I looked onto their website and there was the big spiel about the [training scheme] and it was all ‘we firmly believe it’s better to fully support graduates when they first come out and are most vulnerable because that avoids bad habits developing and the potential worst thing of people leaving the profession or becoming very isolated and things.’ So it was very clear that their ethos was, you know, ‘we’d rather look after you and support you rather than put you in the deep-end because although a lot of people think that’s the best way to learn it’s actually sometimes not’, so...

Interviewer: Yes, and that resonated with what you wanted?

Participant: Yes, definitely, which I often think that makes me sound a bit like a wuss!

Interviewer: Why does that make you sound like a wuss?

Participant: No, just because I can understand how a lot of people think, you know, well it’s true, if you are thrown in at the deep end you do learn very quickly, because you have to. But I just think, yes, I’d rather, if the option is there, I would rather have more support than potentially I needed.

(Interview 33b)

### 5.9.2 Support at work

All participants talked about the importance of support in their first job in the first round interviews while in their final year at university. Experiences of support at work after graduation varied. Some participants had experienced what they described as good support in practice, however more participants had not experienced what they considered to be good support. Analysis of participants' accounts of support generated four themes: what helps, what doesn't help, let down, and responsibility-experience mismatch. These are examined in turn:

#### 5.9.2.1 What helps

Some participants had what they described as very supportive jobs after graduation, some had more mixed experiences, which changed either with changes in the practice or changes in their job. Practices described as very supportive most commonly had provided both emotional and instrumental social support. Some participants had very poor experiences of support. Data in the themes of what helps and what doesn't help reflect this range of experience. Among what helped was job-shadowing:

"I've seen my own appointments but also shadowed some of the [vets] and they've kind of eased me into it and didn't just throw me in there day one with a full schedule, so... it's definitely been a nice transition. [...] I think pretty much the support so far has been really good [...] I'm kind of shadowing this one doctor's schedule right now so he's always there when I am and I can kind of bounce things off of him, like any questions or concerns that I have, so I really think it's been a good support network so far."

(Interview 25b)

The ability to ask questions helped:

"They're very good at saying 'do you want to have a go at this?' or explaining something and saying 'well

perhaps you could go and do it. Do you want to do it, yes, no?’ At the moment although we are fairly busy, everybody’s got time to answer your quick questions about things and everybody in the practice seems to know enough about what everybody else is doing that can advise you if the person you were looking for isn’t there.”

(Interview 05b)

“Normally I can ask any of the senior vets, sort of thing, for a second opinion and things like that. They don’t tend to, don’t seem to mind at least.”

(Interview 31c)

A gradual or phased start also helped:

“It was kind of quite gradual really, it was quite nice, my first day I kind of just had like a... they kind of blocked everything off at the branch that I was in and I did an induction that lasted about two hours and then kind of went round all the different branches. I didn’t really kind of get going until the afternoon of the first day.”

(Interview 26b)

Also important in what helped with support at work was having someone available as second on call. On call was an important area of work that was felt to need support at transition, and a focus of what did not go well for people was often around on call. In this case there was second on call support:

“My boss was second on call with me for like my first year, if not more. And I’m pretty sure she said, I think she said, that we can always give her a call if we want as well. I try not to use it because obviously, unless I’ve got really stuck, but, yes, I mean fortunately, touch wood, I haven’t had to call her up too much. But I’ve only had to call her about one or two things really.”

(Interview 31c)

Having a good boss was seen as important for support at work and affected satisfaction and wellbeing at work, although when experienced alongside long hours, work-life balance was important too:

“I do enjoy it. I always say to people that I really like my job, I’d love my job if I could work nine to five, normal hours. I get a bit fed up towards about six o’clock, when I’ve been consulting all day and talking to people and things [...] my first boss was really good, she’s really helped me a lot and then I got a new boss who wasn’t as good and we had a few people leave and things like that. But, no, it’s been everything I expected it was going to be. Yes, I just get a bit miffed off that we have to work such long hours. Don’t have much time for a life really, outside of it.”

(Interview 32c)

Staffing changes were a subtheme that had a negative impact on support for a number of participants and are explored later and in Chapter 7.

Professional development was also important in participants’ experiences of support:

“It’s been absolutely brilliant. It’s the best new graduate job... So supportive and, yes, sort of got really involved in being able to make new protocols, yes, so really, really good for me.”

(Interview 26c)

As was further training through continuing professional development (CPD):

“Fantastic, absolutely brilliant grounding, lots of support, lots of heavy caseloads, lots of guaranteed CPD. I had two days CPD every month for a year, which was fantastic. I had loads of... my on call we buddied up with another senior vet for six months and then for the next six months they were kind of on the phone and would come out if we needed them.”

(Interview 05c)

However the vulnerability of support availability to staffing changes was experienced by this new graduate vet. They went on to describe how after a year of “brilliant” support, staff changes resulted in a seven vet practice changing to a practice where at 18 months qualified they were the most senior vet there and were expected to run the practice:

“So I did my internship year and then it was really nice they kept me on, and then for the first kind of three months I felt a little bit lost because I didn’t quite have the client base that everybody else had and then I was kind of filling in [...] and then slowly seniors started to leave the practice for various reasons to the point wherein the end of February I was the senior sole charge vet [...] So I’d been there a year and a half. [...] There was me and an intern and all the clients and it was really hard work.”

(Interview 05c)

Support from friends was also important in helping new graduate vets. One described how a WhatsApp group of friends from vet school helped them:

“We’re always going ‘oh this happened to me today’ and we’re all like ‘oh that’s happened to me too, don’t worry about it’”

(Interview 32c)

Another participant described how support from friends helped at a difficult time:

Participant: I did seek out support, particularly from friends in vet school and also friends outside of vet school, and family members. And just told them, you know, ‘I’m worried about this.’

Interviewer: Yes. And did that help?

Participant: It did. I think sometimes it does take an outside perspective to tell you, you know, everyone feels like they’re unprepared and... You know, some mistakes are made and they’re not ready, but everyone goes through those kind of feelings and you need to... [...] and just it was reassurance from other people and

helping you to think you it a bit more logically and things.

Interviewer: Sure.

Participant: You know, you are prepared, you've done this, you've done this... And everyone else feels the same way so you're not alone.

(Interview 28b)

Workplace relationships were important in what helped:

"I think being able to be there when I need to, if I have a question, but also providing support in a sense that maybe encouragement and allowing me to do things on my own as well [...] so whether that's them physically being there or just on the end of a phone – I think either one as long as they're eager to help you and you don't feel like you're bothering them."

(Interview 28b)

As well as veterinary surgeon colleagues, veterinary nurses and other practice staff were cited as important supports:

"They're really good at new graduates, so I'm partnered with one of the older vets that's been working there for seven years, I think. She's just done a medicine certificate. So for the first two weeks it's kind of you're on your own but if you have a question you can go and get her and she can help you, so you're not sort of completely abandoned. And then you're also partnered with a nurse, so you have a nurse at every consult. Because obviously we're a bit slow because you're not used to writing notes and getting the prescription ready and things like that. So you've got a nurse that will do those bits for you initially, so just sort of help get you running."

(Interview 29b)

Support from other practice colleagues was seen as important because it could facilitate social activities within the practice, in keeping with social

support theory (Carver et al., 1989, Cohen et al., 2000). One participant described why a first job had felt supportive:

“Just the feel of it, it just felt right and like all the, you know, there was a lot of vet nurses that were my sort of age and there was a lot of trainee vet nurses and it felt like quite a nice atmosphere and I thought, you know, I’ll get on well with everybody [...] It’s hard to meet new people when you’re in a completely new area and you don’t know anybody [...] So it’s nice to, you know, I’ve only been here a wee while but I’ve been out for lots of meals and out bowling and out for nights out with the girls.”

(Interview 24b)

“Good atmosphere” and a “good team” were also important. This is consistent with other research on veterinary burnout, team dynamics, and job satisfaction, (Moore et al., 2014, Kersebohm et al., 2017) and is discussed in Chapter 7.

“The practice just felt like a really nice place to work, the team all, I know obviously they can put a nice front on when you’re there but even when I walked in they didn’t know who I was, they were dealing with clients in the reception area and even just the feel of that was very genuine and, like, yes... I don’t know, just... Yes, instinct is something you should trust when you’re going round.”

(Interview 33b)

“The team I work with are fantastic, they’ve been so nice to me, and so supportive, and it’s a training hospital for nurses as well so there’s quite a lot of nurses my age who are also learning, so that sort of takes the stress out of it a bit. [...] There’s some really good vets there who’ve supported me a lot, who I’ll ask questions to sort of on a daily basis. And, yes, also the work I’ve just sort of really enjoyed actually, being a vet.”

(Interview 26b)

Other supports during first job were again family members, and other supports such as the veterinary support charity Vetlife, which was mentioned by four participants. Participants may have been aware from a support session delivered during their third year at university that I was involved with the charity Vetlife, and this may have influenced them speaking to me about it:

“I think just talking it out before... What actually saved me was my mum coming up for a week in November and sort of mothering me for a week. I think it's what I needed. But maybe just having the sense, I suppose, to actually phone Vetlife, that helpline that I called earlier. Because I sent my pal to it and what he said to me is that it's like Samaritans but they actually understood vets, you know.”

(Interview 04c)

There was a sense for some participants that things going well was a matter of luck, and an awareness of peers having different experiences:

“Well I'm lucky, I know I'm lucky, having spoken to a lot of peers. I've been very fortunate in the first job that I had, I'm still in my first job, I love it.”

(Interview 33c)

Time for longer appointments, having other vets around, and support for surgery were also valued:

“So when I first started they sort of blocked out every other consult so I had sort of thirty minutes per appointment. I was always at the hospital so there was always at least like four other vets around. Things like surgery, they would ask if I was comfortable doing it, and normally what they'd do is I'd go to surgery but they'd make sure that there was always someone available for backup if I needed. And then I didn't sort of get sent to branch practices until about six months in, when I was pretty confident. [...] We all just kind of helped each other. So it was a good ethos in the practice.”



(Interview 26c)

Predictability of on call work was also helpful:

“So I’m on call every Wednesday, which I really like, I really like the structure, the rigidity in that. Before it would just be so random, whereas I’m always on call on a Wednesday so that’s fine.”

(Interview 34c)

Support for new graduates did not always last long but even a month was described as positive:

“It’s a busy practice but I mean there’s always lots of vets around so there’s always at least two other vets around, and then when I went to the branch practice initially they’d always have a second vet around. [,,,] For the first four weeks and then I was sort of left to it really, but I could always phone over from the branch if I’m unsure about anything, I could always phone over.”

(Interview 09c)

With good support, busy times were described as tiring but positive. One participant described a busy weekend on call:

Participant: I was so supported. Like I had a backup and then we had an extra backup as well, because my backup was a year out and then we had a senior vet hanging about in case we needed it, and we did need her because we had a dog caesarean [...] And we had like two stitch-ups, we had to x-ray a cat, we had a prize-winning top lamb who was having neural problems. We had a horse with an eye ulcer, we had a bull with pneumonia, we had two [surgeries] and two [medically unwell] dogs, [and an animal they put to sleep].

Interviewer: In one weekend? [...] Did you actually get home at all?

Participant: Mmm...! Apparently it’s not always like that, but I didn’t feel stretched and I felt they were so good to me, like every time the next call came in and I was like

‘oh...’, if I sounded at all worried she would just come with me. [...] So it was good, I felt like I learnt loads.

(Interview 34b)

The implications of what helped and how this could inform support for new graduates are discussed in Chapter 7.

#### **5.9.2.2 What doesn’t help**

A number of factors did not help in new graduates’ experiences of support during the transition to veterinary work.

These included a heavy workload:

“Well, it’s depressing. If I tell you, I have spoken to Vetlife because there have been some very black days, especially combined with the fact that, you know, especially the on call, it’s been progressively getting heavier and heavier. To the point where the other new grad left last month, so the work is just getting heavier and heavier and I just said ‘look, I’m getting out.’”

(Interview 30c)

Unhelpful factors also included volume of hours worked and demands of on call work:

Participant: I don’t want to destroy myself and kind of let it go too far, but [...] this is why I’m getting out because I know that it’s obviously taking more than it gives. Because at the minute I’m putting a lot of work in. If I tell you, I was on call Monday night, I’m on call tomorrow night, Friday night, Saturday night, Sunday night.

Interviewer: And you’re working in the day as well?

Participant: Yes.

(Interview 30c)

Interpersonal difficulties with other staff were cited as unhelpful factors:

“To begin with I hated it. Because she, it was just me and her, there wasn’t a lot of... She hadn’t had new graduates before so I don’t think... She thought I’d be more capable by myself and to begin with I was sort of doing operations for her, so I was doing work for her but I didn’t agree that that was what would have been best for the animals. So we kind of disagreed what would have been... And also there was a nurse that used to, unfortunately used to work at another practice that [was known to the participant], she didn’t particularly like me because she didn’t get on with dad, so I think she took out that on me.”

(Interview 29b)

Management issues and staffing problems featured heavily in difficulties with support at work:

“It’s become increasingly mismanaged, partly through a senior partner leaving. We’re under undue stress variously and the person who’s taken over, the senior vet who’s taken over the role of small animal practice manager couldn’t manage a piss-up in a brewery.”

(Interview 4c)

One participant also cited PDP, a post-graduation training self-appraisal and development tool, as a source of difficulty when unsupported:

Participant: But the problem is, you know, because of the lack of support as well, you know, the PDP?

Interviewer: Yes.

Participant: The College, now it’s all well and good to say find someone in the practice, but if there’s no-one in the practice willing to engage, you know, you can’t do it and this is the other barrier that I’m facing. And that is very, very stressful and especially when you talk to the College and they don’t seem to understand that someone doesn’t actually want to engage.

Interviewer: So you can't get anyone in the practice to do the practice side of PDP?

Participant: Yes. The problem is you can't even sign up to it without someone supervising.

Interviewer: Yes. And so have you not started your PDP yet?

Participant: No.

Interviewer: And is that a worry to you?

Participant: Well essentially I've got my three years and unless I bulk it out with normal CPD, you know, essentially I'm kind of in breach of the Royal College.

Interviewer: And it sounds like that's a big worry to you?

Participant: Yes, because they kind of, unless it's filled out with the actual... you know, like I say, because the College says we've got to do it, if you can't then there's got to be somewhere saying if I don't do it I'll come off basically [...] Most of the people I went to uni with, they've done much more.

(Interview 30c)

The participant also explained that they felt that not being supported to complete their PDP left them feeling that they were not a vet.

Understaffing was a common issue with problems with support:

"Yes, there was no support [...] It sounds like really silly but, because we were understaffed, we were supposed to be like on a one in eight rota for like weekends and nights and ended up being a one in three. [...] And not being what you'd expected, and then when you had a problem the problem wasn't like 'oh we're really sorry, we're short-staffed,' it was like 'we expect you to be able to sort it out...' [...] Like 'you're a vet, you should be able to handle it.'"

(Interview 13c)

Not getting breaks for social contact was another difficulty that did not help with accessing support, and was mentioned by several participants:

“My mum keeps texting me and saying ‘I text you on your lunch break’ and I was like ‘I don’t get a lunch break’. You know, ‘why don’t you text me back?’ and I’m like ‘I’m at work, I don’t have time to faff around on the phone’. [...] And she’s getting upset that I don’t see her and I don’t sort of text her. [...] I feel quite bad for that. I just think, you know, I’m not having time to do anything... [...] Everyone thinks, oh, you know, ‘you get the weekend off’ and I’m like ‘no, I work on a Saturday morning as well and I don’t get out until 2 and I’m knackered.’”

(Interview 08b)

Other participants had experienced what was perceived as excessive criticism. This had not helped with support and had adversely affected their wellbeing:

“I was just really, really miserable, I felt like everything, he would sit in the office and like read everybody’s consult notes and make calls down to the consult rooms and be like ‘why did you sell this thing and not this thing that’s more expensive?’ and ‘why have you charged this fee, not this one?’”

(Interview 12c)

Work hours, location and on call duties also interfered with social contact and support outside work:

“I don’t really know anyone here and people at work, they’re all lovely but they’re all like in their thirties and they’ve all got kids, they’re not like going to be like best friends, so like to try and meet young people, it’s all like weekends and... I work like two in three weekends.”

(Interview 13c)

### 5.9.2.3 Let down

The second theme in participants' experiences of support at work was being let down. Even though participants had expressed concerns in earlier interviews about levels of support in their first job, many participants felt let down by the support they received in their first veterinary jobs after graduation.

A number of new graduates described promised support not materialising; some felt they had been misled at interview:

"I just didn't get any support really [...] I started work on the Monday after graduating on the Saturday [...] And I kind of went into work and they had like a full ops list and there wasn't another vet working that day. [...] I remember like... oh my god... And another vet showed up on the Thursday but I'd worked my first four days without a vet being there and it was just a bit manic [...] it was kind of horrible because there wasn't another vet around but then three months later another vet came... It was supposed to be [more vets] but they were hiring me and [...] they hadn't been able to hire the other [vet]."

(Interview 13c)

For others this was due to staffing changes:

"I was meant to be quite a slow introduction and then I arrived on my first day and got told that two of the main vets were off, one of them had broken her ankle and another one's wife had broken her leg... [...] So we were quite short-staffed. And then it was a bit of a crazy day and then a lot of animals ended up coming in out of the blue for put to sleeps and noone else was there to do it, so like 'I'm really sorry, can you do these?'"

(Interview 26b)

Staffing changes influenced support at other stages too, with what had been supportive roles becoming unsupported for several participants:

"When I first started there was a lovely boss who was really supportive, but [...] then halfway through he retired. And then two younger people took it on [...] and

I think they didn't really factor in that they were now the boss [...] they just continued as they had been [...] and it was like a hassle if you had to ask her something and she wasn't there."

(Interview 34c)

New graduates also described asking for support and not getting it:

"I feel it's quite an exploitative and manipulative environment, it's not a good environment. [...] There are certain areas in which I'm struggling, like horse work, you know, and I mentioned this to the senior vet [...] but it never materialised because the boss's wife turned around and said that she didn't want her horses practising on. And there has been virtually no support, you know, and I am owed quite a lot of money by them. [...] I [asked] repeatedly. I can do it, you know, and the fact that, well kind of they're not really supporting me, there's one vet in the practice who basically I can't do anything right for them, you know, so I'm getting negative flack off them almost on a daily basis."

(Interview 30c)

This contributed to decisions to leave a practice – two participants were leaving jobs soon after their interviews. However it also influenced career directions too; the lack of support had influenced the area of veterinary work that both had wanted to work in, and for one had altered a long held ambition:

"[My boss] didn't mentor me [...], he wouldn't let me do surgery [...] it was easier for one of the other ones to do it [...] because I couldn't do stuff I wasn't confident to just get on and do something, so I'd ask them to help me with that and they'd just do it. And if I came across something and I didn't know exactly what was wrong with a dog in ten minutes and would be looking for help with it, then [...] they just do them so I'd never get better at it."

(Interview 06c)

Lack of development opportunities particularly for surgery was a common theme in participants feeling let down and wanting to leave their first jobs:

“Like my old place I just didn’t get to do any ops at all because there wasn’t a rota of such and things would just sort of get taken from you.”

(Interview 12c)

Asking for support and not getting it was a common experience and is explored in more detail later in this chapter.

Not getting breaks during work also contributed to a feeling of being let down for some participants, and again influenced decision to leave jobs:

“I don’t get a lunch break – I’ve had three lunch breaks in the last three weeks. [...] I get home and think ‘all I want to do is go to sleep.’”

(Interview 8b)

New graduate vets talked about administrative problems contributing to a feeling of being let down at points during the transition to practice. One participant who had applied to the graduate scheme of a large corporate veterinary group said:

“It’s been a good and bad process. So they told us in May that we’d been recruited or accepted or whatever, and that they would get back to us by the beginning of July and match us to different clinics, because the way it works is you get hired by corporate and then they pick one of the 200 practices in the country and match you there. [...] Except that there’s been a kind of headache because of people being off work or over-burdened or whatever, and no-one actually got matched until the beginning of August. So bunch of people ended up taking other jobs or just, you know, it was stressful because we were told we had a job and then it didn’t happen.”

(Interview 21b)



Witnessing others not being treated well was raised by a number of participants, and affected their wellbeing:

“And I know I’ve not been happy in my job but some people have been really badly treated and it’s really horrible”

(Interview 11c)

Other new graduates talked about being treated badly themselves, and the impact on their wellbeing; for one this affected their mental health and led them to consider leaving the profession entirely:

Interviewer: And so you said you were thinking about not wanting to be a vet anymore.

Participant: Yes.

Interviewer: Was that because of like the conditions or..?

Participant: I think so. Just the treatment, it was just such a bad experience. [...] and getting shouted at every day for things that are out of your control [...] They didn’t need vets, they just needed people who didn’t care about getting shouted at. [...] No, there was [no support] at all.

(Interview 15c)

These impacts are explored further later and in Chapter 7.

#### **5.9.2.4 Responsibility-experience mismatch**

The third theme generated from analysis of data relating to participants’ experiences of support at work was that of responsibility. This related to the mismatch between the responsibilities new graduate vets were given during transition and their perceived level of competence and confidence. Even the saying “see one, do one, teach one” (said to date back to the 19<sup>th</sup> century surgical training apprenticeship models in medicinal training pioneered by Dr

William Halstead in the USA, but also pervasive in veterinary training and culture) seemed to be more supportive than some of the experiences had by participants in the study. One participant was left as the only vet in a veterinary practice during their working interview:

Practitioner: It was just very stressful because it was sole full charge.

Interviewer: Wow, OK. And was that from when you first started that you were on your own, full-charge?

Practitioner: Yes.

Interviewer: Wow, goodness.

Practitioner: Yes, the owner, I went there for my working interview and she [the only vet present] said it was a four hour working interview and she said 'so I'm not going to stick around just because if I stick around and people tend to come to me for help as opposed to the working interview process, so they tend to go to the owner for help.' So she just left!

(Interview 18c)

Many others were left in sole charge during their first few weeks of work:

Interviewer: Have people being going out on calls with you at first? Is that how it's been or have you been going out on your own or..?

Participant: No, I've always went out by myself [...]

Interviewer: From the first day?

Participant: Yes.

Interviewer: Wow. And was that your choice or did they offer to come out with you?

Participant: No, the first call I went out to and I was like 'am I going myself?' and he was like 'yes, we pay you

now, you're doing just the same job as everybody else' and I was like 'oh no'.

Interviewer: Wow. And how did that feel, on day one?

Participant: It was nerve-wracking because I went out to some sheep and I had to blood sample them, and then I'd never even done that before. [...] I was like 'what if I can't find the jugular vein?' My hands were shaking, I was so nervous. But then when you do something that you've never done before, it is a good feeling. [...]

Interviewer: Would you have liked someone to go with you the first few weeks or..?

Participant: I think at the time it would've been nice but I think, looking back, you're like 'wow', you're chucked in the deep-end but at least that way you learn quick don't you?

(Interview 24b)

Some participants sought to excuse or justify this saying it had made them learn quickly:

"I mean my first day I was a vet I had a student with me [watching] in consults [...] It was like the blind leading the blind. [...] And then the second day I was on my own in the practice, in a different practice. [...] But it's going from being the student for so many years and now suddenly being in charge and making decisions and, you know, and being the only vet there as well at a busy practice is a bit overwhelming. And it's not like, they're not booking in just vaccines and the easy stuff, it's kind of anything and everything that comes in. [...] 'Oh we've got a vet here, it's fine, come up'. [...] And I guess I'd rather that in a way, because it's the only way I'm going to learn. Like I'm not going to learn anything by doing vaccines all day. [...] But sometimes I get like 'oh my god.'"

(Interview 08b)

Even among new graduates who were less critical of being left in sole charge so early, a number had experienced problems and safety issues:

Participant: There was one day when I was the only one in the practice because everybody else was out on calls and I'd done, you know, just speys and castrates and easy surgeries, but then there was this [eye surgery] that was in and I was like 'no, I'm not comfortable doing this' and they were like 'well you'll just have to because there's nobody else here to do it'. [...] They were like 'oh just get on with it, just make it up as you go along', but I was like 'I'm not comfortable doing that', you know, and I couldn't even find a book in the practice that taught me how to do it [...] it was the senior partner. He was like 'oh you'll be fine, it's a piece of piss' and I was just like 'oh, I don't think it is' [...]

Interview: Had you seen one done before?

Participant: No!

Interviewer: Wow. So what did you do?

Participant: The vet nurse helped me find a book and I just sort of started it off and then thankfully one of the other vets came back from a farm call and helped me with it. But then the next day the senior partner came in and was like 'oh, this needs to be done, you've not done it right'. He wasn't like funny about it at all, he was like totally relaxed, and I was like 'but...' and he was like 'oh I thought one of the vet nurses would have told you how to do it a bit better than this', and I was like 'well no the other vet helped me' and he was like 'well he's obviously shit at doing it as well', and then just walked off. And I was like 'well then we shouldn't have been left in that position if he didn't really know what he was doing and he was there trying to help me'."

(Interview 24b)

Although despite describing these as "terrifying", some new graduates still tried to defend being left alone in this way, even when it had contributed to them leaving that post.

Participant: [The senior vet] said that she was available if I had any questions and so I did call her a couple of times when I worked for her, but sometimes it would be in the middle of the night and she wouldn't be

answering! [...] This clinic was a twenty-four hour clinic, if I was working nights it would be eight pm to eight am and so I'd do appointments until about midnight, one am, and then they'd have routine surgeries booked in the wee hours of the morning. [...] So sometimes I had, once I had a slipped pedicle [urgent surgical problem] and that was scary [...] she took another half an hour to get in, so it was really scary.

Interviewer: Yes, and how did that feel when you're on your own with that in a clinic?

Participant: Terrifying. It was terrifying but I think it was good experience, I guess.

Interviewer: In what way?

Participant: I grew a lot, I grew and learned a lot from that experience, but in the end it just got a little bit too stressful on my own.

(Interview 18c)

For a number of participants the responsibility-experience mismatch went beyond being left in sole charge, and persisted through the transition to practice across many aspects of their work:

"Like my first week the boss was away, he was on holiday, and then the other boss was away, so there was only one other senior vet, who also had a few days off as well. So it was like me and then, there's [a number of] practices, and there was me as a new graduate, another girl who graduated last year, and a guy who graduated about two years ago, running [all] of them. [...] And then I was also on visits as well, so all the consults that came in, like full consults, and then visits, when I could fit them in. I was like 'why as a new graduate am I on visits and consults? Because I'm already taking longer than the usual to work the computer and do a consult, I can't do them in five or ten minutes' [...] and then I'm finishing late and I've got the owners ringing up and saying 'you were meant to be here for nine-thirty', [...] so I'm getting home at like seven or eight o'clock, doing like eleven or twelve hour

days, and I'm meant to finish at six. At the moment that's just normal."

(Interview 07b)

Others described a "honeymoon period" where initially they had received some support, but then were left with responsibilities that did not match their experience, with on call, emergency cover, and other aspects of work:

"[My first job] was a mixed practice, I was one of about nine vets, something like that. Three of us, four actually, were fairly new graduates and the rest of the staff were part-time. And I really enjoyed it initially but it quickly sort of, the honeymoon period wore off really quickly and I was suddenly expected to function as if I'd been qualified for a good five plus years. [...] I felt that there was sort of a constant for the rest of my jobs I took after that, that everyone wanted the cheap labour that a new graduate offered but no-one wanted to provide the support that went along with it. [...] I was on call my very second day of being a vet. The first day I was left alone in the building, I was the only vet there because everyone else had gone for lunch. And a [animal hit by a car] came in and I had no idea what to do."

(Interview 03c)

The responsibility-experience mismatch was not only normalised to the extent that even participants who had been adversely affected by it personally at times defended it, but also new graduates who did have support available felt conflicted about asking for it:

"Sometimes I'm a bit worried because, you know, I don't want them to think 'oh you should have managed that yourself, why did you need my reassurance and my assistance?' But sometimes I just think, you know, if I just do it myself and I'm not too sure what's going on, you know, I'm not going to sleep tonight, I'd rather just know that I'm doing things right and then just carry on with it."

(Interview 24b)

New graduates also talked about the impact of the responsibility-experience mismatch, causing distress, even as a witness to it.

“I think with the practice it was so busy, like it was just... and for a new grad to go into that, you know, I was in the practice on my own, ten minute consults that were just an absolute nightmare. There was hardly any support, so if I was on call I’d ring up but whether someone would actually come out and help me or give me advice over the phone, or just kind of... they were just kind of getting me to just do it. And I know another girl, well I think she’s been out three years, and she covered, she does locum work for the practice, and she did her first [type of complicated surgery] in the middle of the night and she called the boss and, well the nurse called the boss, I think she was still scrubbed up, and said ‘can you come and help us?’ [...] and he said ‘well you’ve already started so you might as well just carry on, I’ll get there by the time you finish’. But he didn’t know she was sitting on the floor with her head in her hands, like just in pieces, you know, absolute nightmare.”

(Interview 08c)

New graduates also described being left in tears, and eventually becoming burnt out:

“I got to the point where you get, it sounds a bit bad, but you kind of stop caring as well, which is when I had to leave, because you’re just like not really worried what’s wrong with the animal any more, you’re just trying to get them out of your consult in ten minutes.”

(Interview 13c)

This had impacts on their mental health:

“Not sleeping properly, stopped going to the gym. Probably if you put us in any other profession you would call me depressed but... I didn’t want that terminology applied to me because there’s too much stigma around it. [...] People think you’re weak and also... I don’t want any sort of mental health issue on my medical records.”

(Interview 04c)

One new graduate in the study talked about a near-suicide attempt where they had taken equipment home from work with the thought of ending their life. However they had decided to seek help instead. New graduates also talked about it leaving them not wanting to be a vet anymore:

“I think so. I did sort of five months of the internship and then I didn’t want to be a vet anymore [...] there was no teaching. You started at six in the morning and then I would eat tea at about ten o’clock at night and that was the meal you got, and then you were on every other night you worked through the night, checking the horses, and then you did it until ten o’clock the next day. They didn’t teach, you didn’t learn anything that would help in a career, I don’t think, at all.”

(Interview 15c)

These impacts are explored in more detail in Chapter 7.

## **5.10 Support during study, work and transitions**

At transition from school to university, students reported some expectations which did not match up with their experiences, including an expectation of hands-on experience in the first two years, and of not fitting in with other vet students. Vet school was consistently expected to be hard work, and this was confirmed in themes of stress and experiences of study.

Students reported early exposure to issues of professionalism, in particular encountering ethical dilemmas on clinical and pre-clinical animal husbandry placements, for which they reported little support. Social aspects of vet school were highlighted as both positive and negative: on the one hand a highly competitive atmosphere contributed to stress, and on the other hand tight-knit relationships provided a source of support. Family relationships and friendships with non-vet students were also identified as valuable sources of support, including financial support from families.

Students were reluctant to access formal institutional sources of support, perceiving that their problems may not be amenable to help, or that seeking



help might mark them out as weak or failing. Barriers to seeking formal support included feeling that they were not known within the vet school, long hours and geographic isolation of the vet school, and systems which were not set up to assure discretion or confidentiality. The most significant enablers to seeking support at vet school were previous positive experiences of support and the presence of existing positive relationships with staff.

Transition from veterinary study to practice was associated with similar expectations of excitement, stress, responsibility, and hopes for support. Students and new graduate vets expected to be working long hours and facing ethical dilemmas, possibly as a result of exposure to these in clinical placements. However, early career vets reported starkly divergent experiences of practice. Where vets had joined supportive practices, they spoke positively of a supported transition to independent practice and experiencing satisfaction from contributing to a team. Many other vets reported being shocked by the transition to practice and feeling let down by an absence of promised support, particularly around being left in sole charge of a practice, singlehanded operating lists, and on calls. These experiences were reported as having a substantial negative effect on participants' physical and mental health, and in some cases led to early career vets considering leaving the profession. Many early career vets reported a mismatch between their experience and skills, and their expected responsibilities. Helpful factors reported included positive workplace relationships, a phased start to work, supported professional development, informal peer support and the Vetlife Helpline. Factors which did not help with support included a heavy workload, being unsupported when on call, poor relationships with colleagues, and staffing shortages.

## 5.11 Support summary

This chapter has examined veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment. Section 5.1 looked ahead to chapter content, Section 5.2

located the findings in literature on social support, university to work transition and workplace induction, as well as discussions about contemporary labour market issues. Section 5.3 described the analysis and themes. The subsequent sections went on to look in more detail at those themes. Section 5.4 examined participants' expectations of veterinary study, including not knowing what to expect, being hands on, not fitting in, and hard work. Section 5.5 looked at participants' experiences of veterinary study including stress, social aspects of veterinary study, and professionalism. Expectations of veterinary work were examined in Section 5.6, which looked at subthemes of excitement, stress, responsibility, hopes for support, long hours and ethical dilemmas. Section 5.7 looked at experiences of veterinary work including shock, support, employment practices, gender discrimination, contributing impact on health, and client interactions. Support at university was examined in section 5.8 and support at work in Section 5.9. Section 5.10 summarised some of the earlier results describing support during study, work and transitions.

This chapter has demonstrated the emotional and instrumental social supports used and sometimes not used by study participants. It has looked at expectations and experiences of veterinary work and at times at the lack of support in the workplace and health consequences of this.

In the next chapter I go on to look more at veterinary professional identity, seeking to explore the development of professional identity in veterinary students and new graduate vets as they move from study to employment.

## **Chapter 6 Results - Professional identity in vet students and new graduate vets**

### **6.1 Synopsis**

This chapter explores the development of professional identity in veterinary students and new graduate vets as they move from study to employment, the third aim of this study.

The chapter is divided into nine sections. After the synopsis the chapter continues with Section 6.2 situating the data in theory around identity formation and socialisation. Section 6.3 then describes the analysis. The themes generated in the analysis are examined in the subsequent sections, with Section 6.4 exploring the process of becoming a vet including the early age of deciding to follow a veterinary career, the level of commitment displayed in selection and training, and a “vet or nothing” attitude common among participants. Section 6.5 looks at values in veterinary identity. The study found that veterinary identity can sometimes be in conflict with wellbeing, and this is considered in Section 6.6. Section 6.7 looks at the process of formation of veterinary identity, Section 6.8 describes veterinary identity as found in this study, and Section 6.9 summarises the chapter and looks ahead to the integrated analysis and discussion of the findings of the Veterinary Transition Study in Chapter 7.

### **6.2 Identity, socialisation, and being a professional**

As well as describing influences on veterinary identity, Perrin (2016) distinguished between a large group of veterinary students who were vocationally-motivated, and a smaller group attracted by the high academic standards required. The Veterinary Transition Study did not find a similar group without a primary vocational motivation. Influences on identity in this study were similar, but included further influences which are discussed through this chapter. Similarly to Perrin, this study also found a dissonance in

the organisational discourse in veterinary medicine around high standards and science being primary motivators, and the primary motivators experienced by individuals of animal welfare and care (Perrin, 2016). A further resonant finding with Perrin's study was the compelling responsibility to uphold high standards, the strong occupational history, bonded occupational group, and clear, powerful, sanctioned, officially-approved attitude towards life and work, which, as Perrin describes, permits little deviation. Perrin describes effects of this including intolerance of weakness or complaint, requiring people to internalise unhappiness or leave. Perrin suggests that the distancing from animal care and welfare is a confused message within the profession which occurs during socialisation, and connects this to problems facing the profession including concerns around mental health.

### 6.3 Analysis

The analysis of the data around veterinary identity in this study generated four themes. The theme around the process of becoming a vet was a primary theme generated during first round coding of data, the other themes were generated during second and third round coding. The four themes are set out in table 6-1 along with nine subthemes which are explored in turn through the rest of this chapter:

**Table 6-6-1 Summary of themes and subthemes on identity**

Theme	Subtheme
The process of becoming a vet	Early age
	Level of commitment
	Vet or nothing
Values	Hard work

	Holding responsibility  Caring  Giving things up for veterinary study and careers  High achievement and intolerance of failure
Identity in conflict with wellbeing	
Influences on identity	The process of formation of veterinary identity

## 6.4 The process of becoming a vet

Becoming a vet was a process for participants. It was not a discrete moment in time at graduation, not at their registration ceremony during which they swear an oath, and not even when they started veterinary work in their first job. Self-identification as a vet came later, and was associated with holding responsibility, working alone, out of hours working, and the ability to perform certain key procedures in practice alone. The key milestone procedures were specific to the type of practice, and included canine ovariohysterectomy (“bitch spey”), bovine caesarean section (“caesar”), and management of equine acute trauma or colic out of hours. This sense of the lone, competent, fully responsible professional is at odds with the RCVS’ description of Day One Competencies for working as a vet, and reflects a more universally held sense that being a vet requires a high level of clinical competence and ability to work alone. Here, in the second interview, shortly after graduation, a participant describes whether they feel like a vet:

“[It’s] only just sinking in now I think. Like when people said to me ‘oh you’ve graduated, you’re a vet’, I’m like ‘mmm I’m kind of a vet’. [...] It’s working as a vet. I can’t tell anyone I’m a vet if I don’t know what I’m doing. [It’s] getting it right and proving that you’re actually, you’ve got the knowledge and can do it.”

(Interview 8b)

Also shortly after graduation, this participant sets out an expectation that being a vet is more than the qualification:

Participant: I feel like I've got the certificate but it doesn't actually mean anything until I have a job.

Interviewer: OK. So you've actually got to do it before it counts?

Participant: Yes, you know, I can do the job on paper but can I do it in practice?

(Interview 3b)

The sense of lone working as a signifier of becoming a vet was widespread. There was also a sense of being a "fake" if they needed to ask for help or experienced difficulties with clinical work. Being a vet was described as incompatible with uncertainty:

"Even now sometimes I feel like, if I'm not quite sure, I feel really, in a consult, I felt really bad afterwards because I think 'oh my god, these people are like trusting me' and I just don't, you know, I feel like a fake."

(Interview 8b)

"I think it's gradual because I definitely didn't feel like it when I started. [...] There's more expectation. Even like in final year you can get away with sort of not knowing, whereas now you should just know it all."

(Interview 36b)

These accounts demonstrate the range of expectations new graduates experienced as influencing the experience of becoming a vet: their own expectations, clients' expectations, and their employers' expectations. Most participants in the study described being expected to work alone early on in

their first job, a level of responsibility that requires a high level of competence:

“I just think ‘wow, I’m really responsible now’. Because at the moment, in fact most days, I’m the only vet in the practice.”

(Interview 8b)

“I feel like, yes, I feel like a vet now. [...] Also my on call we don’t have a nurse so I just do everything kind of with the owner or by myself.”

(Interview 7b)

Three strikingly consistent features in interviews with study participants were the early age at which most decided that they wished to be vets, the level of commitment they had shown to this career from a young age, and the “all or nothing” approach to this - an inflexibility in career choice.

#### **6.4.1 Early age**

The early commitment to becoming a vet, and its interaction with the development of professional identity long before vet school was first revealed when talking with vet students in the first round study interviews about their motivations for coming to vet school.

The age range of deciding to apply varied from early childhood – the earliest stated was three years old, but a number of participants stated that it was “as early as I can remember” - to late teens. The study sample was made up of participants who had completed veterinary medicine as both a first and second degree, but even the second degree participants – the oldest participant in the study was 33 - had decided that they wanted to be a vet from childhood:

“I haven’t wanted anything else since I was like four. [...] I’ve just always loved it, always loved animals. And it’s weird because at the age of four you don’t know what it entails at all.”

(Interview 4a)

“I think as soon as learnt what the word was I was like ‘that’s what I want to do’”

(Interview 14a)

“I always wanted to be a vet, since I was really little. Like even my primary school teacher like I found my friend says she remembers me from like four years old saying that I’ve always wanted to be a vet.”

(Interview 24a)

Here a participant discussing when they decided they wanted to be a vet, suggesting an awareness of this very early commitment:

“I was quite old, I was like twelve I think. So older than a lot of people I’d imagine.”

(Interview 13a)

The impact of this very early commitment to a career path has not been examined in the veterinary literature. It is possible that the early age of commitment contributes to the level of personal investment - and investment of one’s identity - involved in becoming a vet. There was a suggestion from some participants that the early commitment made it more difficult to change course when expectations were not met. After a discussion about a participant’s views of veterinary salary and long working hours, from situations they had seen friends who had qualified experience, they commented:

Interviewer: If you’d known that kind of stuff before, do you think it would have changed your ideas about..?

Participant: It’s hard to say because I was so driven to get in. So it was like everything in my life up until that point had been leading towards, like I’d seen all this practice and, like kennels and things, and just every time I was asked what I wanted to do I was like I wanted to be a vet. [...] I just invested too much



probably [...] I think maybe if I was like thirteen or whatever now and knew how things were going to be then maybe I wouldn't be going into it.

(Interview 12b)

Consequences of this investment in veterinary identity for individuals' wellbeing are explored later.

### 6.4.2 Level of commitment

The sense that a strong personal commitment was required for veterinary medicine was one of the aspects of veterinary identity that emerged well before vet school, and appeared in some ways to be selected for by the application and selection process that participants described. All participants in the study described some level of work experience before vet school, and being told that this was required for admission to veterinary study:

"My father keeps telling me that I turned round as a five-year-old and said 'I'm going to be a vet' [...] And then just never changed my mind. [...] I saw my first practice when I was six. [...] My mum and dad won it in a raffle! With our vet. And it's a vet that's treated our animals since I was tiny, and who I'm now very close to, so I've just seen practice with him all the way through. [...] So that's seventeen years."

(Interview 4a)

The types of commitment often went beyond veterinary work experience:

Interviewer: Did you see practice before vet school?

Participant: Yes, I worked at a vet's, so I did Saturdays, like I saw practice with them to start with and then they were like 'oh, do you want a job as a Saturday girl?', so I worked there for sixth form. [...] I went to some of the racing yards [and] there's lots of pig farms as well, so I did that too. And for Duke of Edinburgh [...] I worked at a rare-breeds farm with like pigs and cows and sheep and things. [...] So lots of different species.

Interviewer: Yes, and was that all while you were at school?

Participant: Yes.

Interviewer: Did that take up a lot of time?

Participant: Yes. [...] I wouldn't start school work until seven-thirty to eight at night, so... And then at weekends [...] on the Saturdays I worked at the rare-breeds farm or the vet, depending on what time it was. [...] It was hard work fitting it all in, and trying to maintain a social life as well was quite difficult.

(Interview 15a)

There were striking similarities in the reasons students gave for pursuing veterinary study. All participants said they did this because they wanted to “become a vet”; the degree itself was a means to an end. No participants had studied veterinary medicine for non-vocational reasons or for scientific training alone. This contrasted with Perrin's (2016) study of veterinary professional identity, which suggested a small group studied for science and academic rather than vocational reasons.

In the interviews, participants were asked what had motivated them to attend veterinary school. No suggestions or examples were given to the participants in framing the question. Of the 36 study participants, 35 said that they were motivated to study veterinary medicine because they wanted to work with animals. Fourteen participants mentioned an interest in science - though not exclusively. Eight mentioned an interest or family background in farming. Seven mentioned a family influence in veterinary medicine. Seven stated an interest in medicine, but a sense of not wanting to do human medicine, and work with animals being preferable. Three talked about wanting to work in a physically active job. Three expressed interest in veterinary medicine because they felt it was a studious career – though again none solely for this reason. One person felt they had been influenced by media and television, and two by people they knew outside their family. Two participants said

wanted to work in a “respected profession”, one because of an interest in the human-animal bond, and several mentioned a wish to help people. Several said that family and teachers had tried to steer them away from veterinary medicine but that they had ignored this advice.

There was a suggestion of an early awareness of an unwritten set of rules for vets: that although the primary motivation for participants was working with animals, this was not the correct answer to give at interview for entry to veterinary training:

Participant: I’ve always really liked animals and there’s a lot of other like complicated reasons that you’d say in interview, but that was the main thing, that I wanted to work with animals. [...]

Interviewer: Do you feel there are things people say in interview for vet school that are kind of the ‘right answer’, that they don’t actually mean?

Participant: Yes, because you don’t want to just go in and be like ‘oh I really like dogs and I want to be with dogs’. You want to say things, like I think I came up with some answer that I wanted to help people by improving their pets’ health which would increase the quality of life of the owner. But that’s not really why!

(Interview 5)

This sense of an unwritten code of values for vets - a liking, or even a love, for animals, which should not be spoken of at interview but instead replaced by human concerns - was expanded upon in the determination to do what was necessary to gain entry to vet school. This was discussed by other participants too - an awareness of what was required at interview, and how their actions through activity while still at secondary school were important for this:

Interviewer: Did you do work experience before vet school?

Participant: Yes, I did it... To be honest I’d just done mostly small animal practice. I did a bit of farm, but it

was just kind of the box ticking farm EMS than actually genuinely interested!

Interviewer: When you say 'box ticking' is that to get into vet school?

Participant: Yes. [...] you get advice, like school advice I thought was really unhelpful, but - I know it sounds bad - but internet forums, and the type of people who post on internet forums are not going to post if they haven't done loads. They always kind of say how much they've done and you kind of learn that there's... And they ask at your interview, like I was asked lots of questions in interview, if I'd be interested in being a farm vet, and you're not exactly going to say 'no' are you?

(Interview 13a)

This sense of a hidden curriculum - a set of values and expectations known by study participants but not explicitly taught or stated on the veterinary curriculum - started before vet school and continued in other ways through the study.

### **6.4.3 Vet or nothing**

Most participants talked of veterinary medicine as the only career they had considered, and used similar language to describe their determination to pursue it. A majority - 25 of the 36 students in the first round interviews - said that they had "always" wanted to be a vet and considered no other options. Several students had been rejected on their first application to university to study veterinary medicine, and so had reapplied. Others had not got the grades necessary for entry, so had studied another related degree first and then applied, all the while with becoming a vet as their end goal. Many students, including those accepted to vet school on their first application, used similar wording to volunteer that they had "no backup plan". Veterinary medicine was the only career option they would consider. This was despite them explaining that others around them including parents and supports at school being concerned by the absence of a "backup":

Interviewer: Did you ever consider anything else?

Participant: No, I was very, very set. I was like if I can't be a vet there's nothing else I want to do.

Interviewer: OK, so there was no plan B?

Participant: No. But now I would say I know what I'd do instead. But before I wouldn't have.

(Interview 24a)

"I've always wanted to do it. Since I was about... since I knew what a vet was, that's what I wanted to be, and there's nothing else I've ever wanted to do. [...] And I think my dad was quite worried when I was applying, saying 'oh what if you don't get in' and I was like 'that's not an option, I just have to get in.'"

(Interview 26a)

There were no set questions in interviews about "backup plans" yet the similarity between a number of participants' accounts of their single-minded approach to application was striking:

"My mum kept asking me when I applied, like 'so what'll you do if you don't get in?' and, you know, like 'do you have a backup?' and there's nothing else I really felt like I wanted to do so... I don't know what I would've done if I didn't get in! [...] I think I would've probably taken a year out and then reapplied."

(Interview 22a)

It seemed that despite advice from family and teachers to plan alternative career options, participants did not want to, and instead considered that it was "vet or nothing":

"I was sort of told to think of plan B in case I didn't get in [to vet school]. My plan B was always to take a year out and try again, there's nothing else I wanted to do."

(Interview 26a)

“So my dad is a vet, so my... and I’ve just, that’s the only thing I’ve ever wanted to do. I’ve never had a backup plan. Even though that’s maybe not a great idea in hindsight, but, yes, I think it’s just growing up in the environment.”

(Interview 27a)

This single-minded determination is reminiscent of descriptions by vets with experience of suicidal thoughts and behaviour. In a qualitative study, participants said that their suicidal thoughts and behaviour had been influenced by wanting to leave the profession, but feeling trapped and seeing no alternative (Platt et al., 2012b). The fixed “vet or nothing” view in this study seemed to have been set in childhood, long before application to vet school. It was echoed by the student who attempted suicide in their final year at vet school, discussed in Chapter 5, who felt that veterinary study had influenced their suicide attempt. They said that they felt that suicide risk was a worthwhile collateral cost of pursuing a career that was all that they had ever wanted to do. The interaction between feeling unable to pursue a different career from the outset, and then feeling able to leave that career and feelings of entrapment and hopelessness at times of difficulty needs further exploration.

## 6.5 Values

Values are a core part of professional identity and identity theory, but again have not been well explored in the veterinary literature. The shared values that formed part of the veterinary professional identity in this study emerged early in the study, and although some changed in terms of the level of personal expectation participants held themselves to, overall the professional values that emerged as important to participants were remarkably consistent for individuals through the study, suggesting values-based aspects of professional identity may be formed, at least in part, before professional teaching is completed. Through this study five values emerged from the interviews with a high degree of commonality from participant accounts.

These were hard work, holding responsibility, caring, giving things up for veterinary study and careers, and high achievement and intolerance of failure

Transition to practice was a key time for some elements of professional identity. However, the understanding of these values as core had developed before the first round interviews, during the final year of participants' study, and was evident when the participants were still students. Responsibility and caring were in some ways more abstract at this stage than later in the study, but still important to the students. That these values were remarkably consistent and unchanged through transition suggested that ideas around responsibility for life formed part of values before the students took on that individual responsibility as practising professionals.

Participants' commitment to hard work was evident throughout the study. For example, at university:

“When it’s the month before exams, no, I think that I’m literally eating, sleeping and studying.”

(Interview 25a)

And in the workplace:

“I think the expectation from most practices is that you work nine to eight or similar [...] even where I am now it’s eight-thirty to seven-thirty. So I think the expectation is an eleven hour day.”

(Interview 34a)

Hard work was not just in terms of expectation of long hours, but also missing breaks, and working hard within the time spent at work. This went beyond personal expectation to what was expected of the participants in practice by some employers:

“But where I started every single second of your time was scheduled, except for the one hour you had for lunch, which meant that you had to do all your paperwork, all your call-backs, all your reporting of

blood results, you know, checking up on patients, in that hour, which you weren't paid for."

(Interview 34c)

"Most of the practices I've worked... My first job you had to be in at 8 o'clock and you left at 7 at night. And it was non-stop, [...] And there was never any lunch breaks, you never got, you know, from here to now you can go and get lunch, there were many, many days where I just didn't have lunch and I just worked straight through and then you'd go home, think about cooking and usually just go to bed."

(Interview 3c)

Out of hours and on call responsibilities were understood and described by participants as part of the job, and the majority of students in the study during their final year interviews talked about wanting to do on call work. Long hours of work and the most onerous aspects of out of hours working rotas were seen as a feature of transition and expected to be highest in the first few years of career, with more out of hours and on call working expected at this time too. For most participants, out of hours on call working was on top of working during the day, sometimes compensated for by a single half day or day off in lieu for being on call for a full weekend. There was an expectation that this would decrease after a few years in practice, but it was unclear whether this expectation had been taught. A common time that participants expected hours to improve was around 2 years after graduation, but there was an expectation that the hard work of being a vet would persist, and was part of what it is to be a vet.

"[I] started at like eight-thirty am, which is pretty standard. And then consults went until seven pm. But I did have a day off a week, but then I would be on call twice in a week, if not more than that, because there would always be first on call and then second on call. But that was just because there was so much that we couldn't do, we did have backup really. And then weekends you were on, it was like one in two basically it ended up being."



(Interview 21c)

Hard work was seen as part of the job: expected, inevitable, and that work-life balance was only something that could be achieved later in one's career, after the transition to practice. Responsibility, and particularly the holding of responsibility as an individual, often without back up, was also a common theme among values that were experienced as important to participants, and expected from others. This was striking in its individual quality: rather than responsibility being held as a team, it was held as an individual. Earning trust or being worthy of the trust placed in the profession was part of this. This could be seen to be in keeping with the RCVS standards for veterinary surgeons (RCVS, 2013a) where individuals have responsibility for animals under their care and this expectation may be placed on new graduates and discussed explicitly during training. Here a participant talking about what they perceived was the most stressful thing about veterinary work:

“You can't really go 'OK, well I'll get back to you once I've read the book'. [...] You always want to sort of try and do something for the owner. [...] Probably the most stressful time, is when I'm not quite 100% sure what I'm doing and I'm sort of like I have a vague idea but not a concrete one [...] And I know sort of a lot of the tricks is to say 'well OK we'll do this and then I'll give you a call later.'”

(Interview 35c)

Gender issues in veterinary medicine require further research. As described in Chapter 5, there was concern among participants around pay inequality among new graduates between men and women, that male students received preferential recognition to female students, and other issues beyond the scope of this analysis of identity. Responsibility was a source of anxiety around transition, but was also something that new graduates took pride in. Trust wasn't just earned from clients or built with them, but with colleagues too, but was sometimes experienced as being left to work unsupported:

“I think I’ve done OK and I just hope that like they’re leaving me to do things myself because they think I’m capable of it [...] well obviously they trust me or else they wouldn’t just leave me alone...”

(Interview 24b)

Caring for animals was evident throughout the study but care for clients became more apparent as a core value after working in practice. When ability to care for animals in the way that the participants wanted to was challenged in ethically difficult situations this had an impact on wellbeing. This sense of moral distress - knowing what they wanted to do by their own values but being unable to - occurred before the transition to practice, and was described by some participants during their time at vet school. There was a sense of pressure both from clinicians and clients to perform clinical activities the students were at times not comfortable with:

Participant: I think because it’s referral there is a bit more of the superhero stuff and people who bring their animals this far do want a resolution one way or the other.

Interviewer: Yes. And how do you find that?

Participant: I’ve found it challenging at times. Like when I was on [a clinical rotation] there were cases that I felt probably should’ve been euthanized earlier or been managed slightly differently. And I think that’s sometimes a factor of hospital practice, is the senior vet walks in, makes the decision, leaves again, isn’t with that animal all the time, so... and it takes quite guts sometimes to turn round and say ‘no, actually, I disagree with you’. [...]

Interviewer: How do you manage that?

Participant: [...] We just turned round one day and said ‘her pain medication is inadequate, she’s not screaming because she’s got a massive brain tumour, she’s screaming because she’s in pain’. And we just kept saying it and saying it until somebody listened.

Interviewer: Yes. And what impact did that have on you, having to actually say that to people? Was that hard?

Participant: It was hard, but I think afterwards you kind of know that you're able to turn round and say 'I don't like this'.

(Interview 4a)

Another value which formed part of the veterinary identity reflected in participants accounts, and again which existed before vet school, was that of giving things up to facilitate a veterinary career. A striking example of this was a participant who had attempted suicide during their final year of study but who considered the risk of almost losing their life to be an acceptable consequence of veterinary study:

"So I think if I hadn't come to uni then it wouldn't have happened at all [...] But then if I hadn't come to uni I wouldn't be a vet. So it's like it's something I'm willing to... if this is what it takes to be a vet then fine, you know."

(Interview 8a)

Participants discussed giving up relationships, hobbies, and interests including participation in Olympic level sport, delaying starting a family, missing time with children and unwell relatives, missing family holidays, and a range of pressures on themselves and others around them which were accepted as part of pursuing a veterinary career. As discussed in Chapter 4, giving up things important for health was normalised and expected by participants.

For some the sense of loss associated with giving up such things was palpable in interviews. During an interview where the participant was talking about having given up a sport for their veterinary study the interview had to be paused twice because the participant was crying. The participant was offered the opportunity to stop the interview but said they wished to continue.

“I look at other people that were training at the same time as me, or that I used to compete with, and they’re like going to the Commonwealths this year. [...] And you’re just kind of like ‘what if..?’ I’m not saying I would have been at that level but... [...] I feel like I put too much into uni. [...] That’s because I worry about not doing well at uni.” [crying, interview paused]

(Interview 16a)

A sense of inevitability and acceptance that giving things up was expected was common among participants, particularly in the time of transition of final year and the first 2 years in practice. Here a participant who had discussed running a charity and taking part in various sports during earlier stages of university discussed the impact of final year:

Interviewer: Have you found that you’ve been able to keep some of that up this year?

Participant: No. Nothing! Absolutely nothing! I had to give everything up!

Interviewer: How’s that been?

Participant: Well I think I was expecting it.

Interviewer: Right.

Participant: No, I’ve not been able to do anything. All the university stuff happens during the week and if you’re doing like earlier mornings it’s just, you can’t do it, and then I just don’t have the time to study and do something else. I don’t mind this year though.

(Interview 20a)

Intolerance of failure and a desire for high achievement was a commonly held value throughout the study. There is ongoing debate in the veterinary literature and industry about perfectionism. It was an issue raised by participants in this study, but often a characteristic they identified in others around them rather than themselves. More evident than perfectionism were

shared values around high achievement which they felt were both external and internally experienced. These expectations were widely experienced. Competition formed part of this. Benchmarking against colleagues was common, and a driver for hard work. One participant, talking about a sense of competitiveness they had experienced, described it as:

“Like, you know, wanting to know everything on the rotation and going home and doing the research about a certain case, so that you are prepared the next day, and that you don’t look stupid and, you know, just making sure you’re up to par with your colleagues and other group members in your final year groups.”

(Interview 25a)

They talked about how this effect was more marked in some groups than others:

Participant: Like I think not every group is like that but I know certain groups are and it can be a good thing because it motivates you, but it can also be really stressful and you think everybody in your group is smarter than you [...]

Interviewer: So do you think those comparisons are sometimes made between students, like students look at other students and think, I worry that they’re smarter..?

Participant: Yes.

Interviewer: Do you find that you do that sometimes?

Participant: Oh yes, I think I do that too. Definitely.

Interviewer: How does that leave you feeling?

Participant: Yes, I mean it’s stressful and then you kind of self-doubt yourself and you think ‘how do they know all that and why don’t I know that?’, or like ‘oh I’m so stupid, I don’t know anything’. So, yes, definitely like kills your self-confidence basically.

(Interview 25a)

The participant went on to say that after a full day of clinical rotations they were doing hours of additional study in the evenings:

“So, you know, going home and then after dinner or something, maybe like four hours of studying.”

(Interview 25a)

The sense of fear of failure on rotations and the need to know information to avoid humiliation was one that was discussed by a number of participants:

“It’s when you finish clinics at six and then by the time you get home it’s seven and then you feel tomorrow you’ve maybe got an interesting case and you’re maybe not up to scratch and you think ‘oh I’m going to get into trouble by clinicians and I’m going to get grilled if I don’t know the information’ and so sometimes I think ‘oh I should really stay and read up on that.’”

(Interview 10a)

It was not only external motivation for this though; self-motivation to achieve highly and not tolerate failure was evident for some, with high personal expectations of themselves driving long working hours:

“I think it’s just the fear of like failure. It’s not like, again, that I want to get 100%, it’s just that I want to pass because I feel I’ve put so much work in I owe it to myself.”

(Interview 16a)

Expectations from family, particularly for mature students where there was significant financial investment in their study, also arose:

“I think it was maybe pressure from myself, but also [...] that I should be able to deal with everything [...] and everyone’s like ‘oh you’re going to vet school’ and then struggling, and my vet work, you don’t really admit that you’re not managing [...] especially since my [spouse] had like supported me and, you know [...] It’s a big

financial commitment when you're a graduate, it's a lot of money and, you know, that financial thing... [...] Like doing it and not being able to manage, so it has always been in the back of my mind the whole time."

(Interview 17a)

## 6.6 Identity in conflict with wellbeing

The veterinary identity of being hard working, responsible, and caring, giving up things of personal importance, operating with high standards and never failing established a problematic identity for individual wellbeing. Some study participants had an awareness of this and reflected when discussing their expectations how this was not good for them:

"It would be better for myself if I could say 'oh I don't need to study for this extra hour, it's not going to make any difference', but, yes, sometimes I struggle with that."

(Interview 16a)

This awareness of how veterinary identity might not be good for them led some participants to adapt to help manage the effect on them. These adaptations included deliberately taking time out from study and maintaining other interests to manage pressure. However not all study participants did this, and for some the problematic aspects of veterinary identity were accepted.

The view of a vet as necessarily a clinician, who can manage complex clinical situations without help, works out of hours and at night, with multiple species, presents a difficult challenge for new graduates in contemporary veterinary practice. It is a level of expectation far beyond that of the Day One Competencies required by the RCVS to register as a vet in the UK. This concept of what it is to be a vet: a clinician, omnicompetent, multi species, surgically adept, independent and lone practitioner performing 24 hours a

day was in some ways surprising. It is at odds with profession-defined priorities for new vets.

Within the veterinary profession there is a confusing and somewhat conflicting focus. Narratives around veterinary medicine talk about protecting public health as well as animal health, and veterinarians' wider roles in one-health concepts around human health. Vets' roles in global food production and food safety are also emphasised, in projects like the Vet Futures project led by the RCVS and British Veterinary Association looking ahead to veterinary medicine in 2030, and also blueprints for new vet schools and for UK veterinary training. The traditionally small number of UK vet schools has grown in recent years with two newer schools opening in Nottingham and Surrey. Both of these have emphasised alternative roles to clinical practice for the future of veterinary medicine. Yet, the profession, via the RCVS and the vet school's council, also produces a list of Day One Competencies which vet students must meet to qualify as a vet. These are clinically focussed, as is the RCVS PDP, which new graduates must complete in the years following graduation if they want to go on to complete further RCVS approved qualifications. There is a conflicting narrative between encouraging wider roles for vets, but training expectations and requirements still focusing strongly on clinical procedures. However the focus for participants in their sense of what it was to be a vet was less conflicted. In the study there was a clear, shared, sense that being a vet required clinical work, and that not performing clinical work threatened their professional identity and sense of what it was to be a vet.

This clinician-identity was problematic for participants' mental health in a number of ways. The idea of complete independence and omnicompetence sets new graduates a difficult goal to meet. Much veterinary clinical work requires team working, and safety for new graduate practice is focussed around seeking support and involving the rest of the team, yet this idea conflicts with new graduate experiences. It is perhaps their experiences and what they have witnessed, rather than what is taught and discussed about new graduate veterinary life- that influences this aspect of identity. Previous



studies with new graduates have found that almost all have been often left unsupervised (Mellanby and Herrtage, 2004), and this study found this too. Almost all new graduates had been left unsupported at times when they felt that they needed support, and many had not had clinical help accessible even when they asked for it, and when it had been promised to them. There was also a common theme of burdensomeness amongst participants, and a shared belief that they were a burden on their employers:

“All the vets I have talked to [say that] we are burdens. We’re not going to be making them money. We’re going to be making mistakes. We’re going to be a bit like ‘I don’t know what to do with this situation’, you know, we’re not confident, we don’t do surgeries in 15 minutes.”

(Interview 1b)

This idea of burdensomeness had specific shared elements, including that as new graduates they would not make any money for their employers until 18 months after graduation and that they would incur a net cost to them. This belief impacted behaviour, for some it meant accepting exploitative employment practices willingly, or that they would take any work that was offered to them, and should just be grateful to have a job:

“I’ll take the first job that’s desperate enough to have me”

(Interview 3)

It also had emotional consequences, including guilt at needing support:

“I feel like I’m kind of like a burden at the moment, like I feel like this vet who’s, bless him, got to sit in reception just for a whole afternoon while I, if I need him I can call him in or whatever... So I do [...] feel a bit bad for them, having to put that in place.”

(Interview 9b)

So, what new graduates felt that they must become - someone working alone - is at odds with common safety advice to new graduates, to seek support

and ask questions if unsure. It was also at times at odds with personal safety: new graduate worries about attending night calls alone or driving when tired at night were put aside and for some, considered incompatible with being a vet. The emphasis on surgical competence and night work in particular as part of veterinary identity also led to new graduates who were interested in other areas of veterinary work justifying their decisions, and at times feeling they were a lesser professional for those decisions.

Although most participants in the study did not want to work in mixed veterinary practice as their final veterinary career point, many felt they needed to serve time as a mixed vet at the start of their career, and searched for jobs of that type. Only those with a very strong sense that they wanted to be small animal or equine clinicians felt they did not need to do this. However even for those choosing one type of work exclusively, where that was farm animal or equine work, there was a sense that they must spend some time doing small animal work at the start of their career; partly because this included more of the highly valued surgical skills, but also because it was seen as an “insurance”. Physical injury was almost expected by new graduates, and students felt they needed to balance future career options and plans in a complex way, with backup choices of other types of practice to their primary one. There was a sense that farm animal and equine work incurred greater physical hazards and that small animal work could offer an alternative after injury.

## **6.7 The process of formation of professional identity**

Becoming a vet was a process, as was the development of professional identity, and both started early, before application to veterinary school. Accounts of veterinary identity in the veterinary literature and professional discourse centre around professionalism, taught through formal learning, and focus on career values and behaviour associated with employer-identification post-graduation. The identity that was revealed during the interviews in this study is one that has implications both at the individual level - influencing

participants' internal worlds, mental health, and aspects of their life choices - and at the group level - with core themes of identity shared and strongly held among the group of participants.

The identity described in this study was formed long before formal professionalism teaching commenced, which usually occurs in the penultimate or final year of veterinary undergraduate study. Instead aspects of the veterinary identity that emerged for participants started early in life, and existed before notions of career values, or professionalism.

Rather than an ideal of professionalism, or professionalism teaching and curricula shaping veterinary identity, veterinary identity existed for many before vet school, and shaped the response to professionalism teaching. Participants felt strong allegiances to veterinary medicine - which for many started from as early as pre-school age - and most had never considered any alternative career or path in life. This went beyond just a desire to be a vet; other aspects of the veterinary identity including shared motivations, values and ideals existed among participants before vet school, and went on to be further socially constructed throughout students' time at university.

By the time of transition to practice, a strong sense of identity already existed for participants. This developed further and was reinforced or challenged at transition, but some elements seemed fixed during or before participants' time at vet school and their exposure to veterinary professionalism training. All participants in this study were exposed to this training, and other studies have looked at how curricula post-graduation may further influence identity. However the identity that participants talked about and knew in this study was not primarily influenced by professionalism teaching. Instead other factors were discussed as influences, including the hidden curriculum – the values and norms participants observed whilst at vet school and out seeing practice with vets - their own ideas about what it was to be a vet, a strong multi-level group culture that persisted beyond individual expectations of self to group and wider profession expectations, and role modelling.

Although veterinary identity was investigated directly through participants talking about what it meant to them to be a vet, and their experiences of becoming a vet, identity was also important in other parts of the study. Through the interviews and analysis, in trying to understand participants' experiences of mental health, and in trying to separate veterinary and non-veterinary factors in analysis, it became clear just how strong veterinary identity was. Even during veterinary university education, aspects of veterinary identity were so strongly held that the personal and veterinary factors could not be completely separated. Being a vet was a key part of who participants felt they were, to the extent that many other aspects of their lives were affected by it. Mental health factors were enmeshed with this identity, and aspects of behaviour driven by identity and shared culture acted both for, and against, individual mental health.

Influences for professional identity which emerged in this study were personal and group expectations, culture, role modelling, role rehearsal, and legislative and professional expectations such as night working and 24 hour responsibility. Role modelling and difficulties for wellbeing in veterinary work related to pressure directly from role models as well as aspirations and modelling. A participant describing why they felt one hospital they trained in was a more negative influence than other aspects of their training reflected this:

"I think part of it might be the amount of interns and residents they have in the [name of] hospital, because they are under a large amount of pressure to know their stuff, so they are putting us under a lot of pressure to know our stuff to an equal degree, whereas I think there is a little more recognition [elsewhere] that we won't need to know referral stuff. We are going into general practice, if we were going to know referral stuff we'll become an intern, we'll become a resident."

(Interview 1a)

This participant also highlighted a tension between the referral-level training they felt they primarily received, and different aspirations for work

destinations in general practice among the participants. To a small extent there was some reverse role modelling, a sense of not wanting to be like that:

“[I] see the residents over in that hospital and it’s definitely not... I don’t want to be under that pressure, I don’t want to be criticised that much. I know myself and I would not do well [...] I wouldn’t enjoy it and that’s the whole point of my life. I don’t want to not enjoy my life, so I want to work in general practice.”

(Interview 1a)

Some framed these observations of clinicians they trained with as observing culture and again for some this was reflected as reverse role modelling, what they did not wish to be like:

“I think sometimes people maybe bring it on themselves a little bit by their attitudes to ‘oh I’m just going to do this, I’m not going to stop for lunch’ [...] I think it’s a bit of a culture that they feel that that’s what you do when you’re a vet. But like it’s just silly really because you’re just going to ruin your life.”

(Interview 12a)

Even with those reflections though came a normalisation of giving up self-care for the period of transition:

“It’s fair enough in vet school or maybe as a resident or an intern when you’re only doing it for a few years, but if it’s something that you’re going to do for 40 years then you can’t live your life like that really.”

(Interview 12a)

Participants were aware of being influenced by clinicians’ working culture, particularly that of residents (qualified vets training to be specialists) in the referral hospitals they trained in:

Interviewer: When you said people in the [name of] hospital, is that the clinicians..?

Participant: Yes, the residents.

Interviewer: Does that influence the students, do you think?

Participant: Yes, I think it does. And I think that's probably where the problem stems from, because people come out of vet school and that's what they think a vet is supposed to be like. I've got a friend who thinks that if you've not ruined your life at your job then you're not a good vet, and that's like reflection of... I know a few people like that, that it makes you a bad person or a bad vet, and I don't think it does at all, because you still have to be able to relate to owners and I don't see how you can do that if you're... [...] I think it's the way that they've seen all these people at the tops of their career, and they think that the two are related, and maybe they are in a way, but I don't... [...] I think it's easy to get caught up in this idea that that's what it takes to be a good vet is to have no life outside of veterinary medicine, and if you don't spend all your free time worrying about your cases it means you don't care, which I don't think is true.

(Interview 12a)

Aspects of professional identity which were important to participants included personal development into a professional role, respected status, being trustworthy and competent, independence, omnicompetence, being "strong" rather than "flaky", and being a good vet. Being a vet was the most valued concept and strongest motivator. Being a professional, or an employee, was seen as part of, though lesser to, being a vet. Career was deprioritised and core aspects of career including remuneration, progression, and working conditions were considered of low importance to participants as they started out in their veterinary careers. Some participants even in the third round interviews who had been working for over a year, talked about how they had never signed a contract of employment as a vet, and some at second round interview who had been working for several weeks did not know what they would be paid:

“I haven’t signed one [a contract]. When I started there were no contracts, like they hadn’t had a contract in ten years.”

(Interview 8c)

Participants’ commitment to their work was evident beyond a willingness to work in uncertain working conditions. Participants discussed a readiness to take on physical and psychological risk, and an expectation that this was a normal part of being a vet. The role of veterinary identity as a possible moderating factor on the impact of job demands and job control on job strain may have relevance for further interventions to improve mental health during the transition to practice.

## 6.8 Veterinary identity

Veterinary professional identity started early, even before vet school for some participants. Veterinary identity was a process of becoming, and comprised self-identification, giving things up, values, expected norms and standards of behaviour. It went beyond ideas of career or professionalism that is taught on the veterinary curriculum, and was formed in a number of ways which are explored throughout this chapter.

Veterinary students self-identified strongly as veterinary students, with a stronger link to the veterinary parts of that identity than the university and their student experience more broadly. However being a vet was a process of becoming, and not an event that happened on passing final exams, nor at graduation, not the subsequent ceremony of admission to the RCVS, or even at starting veterinary clinical work in practice.

As students, participants felt that they would become a vet when they passed their exams, or started work in practice, but when asked whether they felt like a vet, new graduate vets in clinical practice often did not. Even on starting work in practice, many participants did not consider themselves to be a vet. That sense of authenticity and transition came later, and for many participants coalesced around a point of an individual sense of competence.

Being a vet was associated with working independently, not needing help or support, and the ability to manage a wide range of complex clinical procedures alone, and often with more than one species-group of animal. Sentinel procedures for this included managing a cattle caesarean operation alone and without help, management of surgical colic in horses, ovariohysterectomy in dogs. Participants felt that they had to have reached a level of competency in order to be a vet. Qualifications and registration alone were not enough. There were strong shared professional values and expected norms of behaviour among participants, however these had consequences for individual wellbeing which were not always positive.

## 6.9 Summary

This chapter has considered the development of veterinary professional identity in veterinary students and new graduate vets as they move from study to employment. After a chapter overview in Section 6.1, Section 6.2 considered literature on veterinary professional identity most relevant to the data. Section 6.3 described the data analysis. The next four sections, 6.4-7.7 explored the four themes in veterinary identity in this study: the process of becoming a vet, values, identity in conflict with wellbeing and influences on identity. In Section 6.4 I considered the process of becoming a vet examining four subthemes: early age, level of commitment and “vet or nothing”. The penultimate section, 6.8, describes the veterinary identity found in this study. In the next chapter, I continue by discussing these findings, and integrating them with the findings of Chapters 4 and 5.



## **Chapter 7 Integrated analysis, discussion and conclusions**

### **7.1 Synopsis**

This chapter develops the themes and analysis set out in Chapters 4-6. It addresses the three aims of the study in turn, and the extent to which the findings of the Veterinary Transition Study achieve those aims. It considers how the aims, although they started out as distinct, became less so as the analysis progressed and what that might say about the interaction of experiences of work, support, identity, and mental health for veterinary students and new graduate veterinary surgeons.

Section 7.2 reviews the first aim of this study: to provide insight into veterinary student and new graduate vets' perceptions and experiences of their mental health and wellbeing during the transition from study to employment. It starts by looking at perceptions of veterinary mental health and wellbeing, considering stigma and cultural features of veterinary perceptions of mental health and wellbeing, including ideas around inevitability of stress. It considers whether this narrative or expectation of inevitability could be harmful then goes on to consider another question about expectations and narratives and culture. It poses a question about cultural scripting and suicide in the veterinary profession, and whether awareness of high rates and veterinary talk about suicide may contribute to the perceived availability of suicide as an option. Section 7.2 then goes on to look at experiences of mental health, mental health in transitions, experiences of suicidal thoughts and behaviour, stress, and influences on veterinary mental health.

Section 7.3 discusses the second aim of this study: to understand veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment. It considers expectations of study and of work, and where these were not met. It then goes on to consider the

concept of moral distress and where this was found in the study. It discusses themes around experiences of work, expectations of support, and how veterinary identity may moderate how support is used, drawing on Karasek's (1979) model of job strain.

Veterinary identity is discussed in Section 7.4, which reviews the third aim of this study: to explore the development of professional identity in veterinary students and new graduate vets as they move from study to employment. It looks at the analysis of the development of veterinary identity, features and characteristics of veterinary identity, and how veterinary identity affects mental health. It goes on to propose an integrated model of how veterinary identity interacts with veterinary stress.

This chapter goes on to look at strengths and limitations of the study in Section 7.5 and then to suggest questions arising from the study in Section 7.6.

In Section 7.7 I make recommendations based on the findings discussed in this chapter and the implications arising from these. I look at recommendations for universities, recommendations for vets, for veterinary employers, for the wider profession including professional regulators and for future research.

Section 7.8 concludes the chapter, and this study.

## **7.2 Experiences and perceptions of mental health and wellbeing among veterinary students during the transition from study to employment**

### **7.2.1 Perceptions of veterinary mental health and wellbeing**

There were three ways in which participants' perceptions of veterinary mental health and wellbeing became important in the analysis of this study. First, there was role of stigma and perceived weakness of help-seeking. Secondly, there was a sense of inevitability around poor mental health. Thirdly, the

effect of veterinary narratives around suicide, and suicide and death as part of veterinary culture.

#### **7.2.1.1 Stigma and reluctance to seek help**

Participants' accounts of stigma, discrimination and fear of career detriment highlighted this as a significant barrier to accessing support, even to the extent that dying by suicide may be perceived as preferable to experiencing stigma associated with seeking help for mental health problems.

These complex and sometimes internally conflicting attitudes towards talking about suicidal thoughts and about mental health lay behind a strong belief that whatever the reason, the students did not want anyone at the vet school to know about these types of experiences. This has implications for those seeking to support vet students experiencing mental health problems or suicidal thoughts. Talking is not only stigmatised, but actively resisted:

“People think you’re weak and also... I don’t want any sort of mental health issue on my medical records.”

(Interview 4c)

Because of this, suicidal thoughts and even suicide attempts during veterinary study may not be known about by the school, making school-based prevention and assessment of risk difficult. It also has implications for the students: people who are unable to disclose mental ill health may receive less support, have lower wellbeing, and experience less supportive interactions.

#### **7.2.1.2 Stress as inevitable**

An unexpected finding of this study was the strength of the narrative that vet school and the transition to veterinary work would be stressful and difficult:

“So I think that will be quite stressful, when it comes to the stage that I have to deal with things [...]. But then I already foresee those.”

(Interview 29a)

This had formed via a number of processes: “horror stories” from friends who had graduated, from the school, and from the wider profession.

“Probably quite stressful. I’ve heard different accounts. One of my vets at home told me that for the first six months of her first job she was sick every morning!”

(interview 33a)

Although often seen as positive “awareness” it was unclear whether for these participants awareness of stress had an adaptive function. In fact for many it seemed the opposite. An expectation of stress led to a passivity when it was encountered, a sense of inevitability, entrapment, and low motivation to change the situation because they saw it as a veterinary rite of passage that would occur anywhere. This raises questions for how the profession talks about mental health, stress and wellbeing, and potential unintended harms of awareness if that is perceived as an inevitability without the ability to act to change it.

#### **7.2.1.3 Veterinary narratives around suicide**

In a similar way to the inevitability around stress some participants also saw suicide and death as an expected part of the veterinary profession, and indeed professional training. One participant in the study even talked about how they had first come across this when preparing for interview for admission to veterinary school as they believed this to be among possible interview questions:

“I think it first stemmed from when I was preparing for interviews and obviously one of the things that they sometimes question is are you aware of the high suicide rate of vets, blah, blah, blah, and that initially shocked me obviously, and then made me quite intrigued as to why.”

(Interview 33a)

Participants talked about bereavement by suicide, how this had affected them, and the response they had perceived from the university to this.

“Basically what happened was one of our colleagues committed suicide, so we didn’t know exactly what the reason was, but I didn’t really know him personally but I was still really traumatised by what happened. Because I didn’t think that... Like I’ve heard of like how veterinary profession has a high suicide rate but I didn’t think that someone in my year, or in any year, would do something like that. [...] Like, for example, I know that afterwards like the uni kind of made us meet our personal tutor a lot more, like for guidance and stuff like that, probably because of that incident.”

(Interview 23a)

Bereavement by suicide is a risk factor for suicide, and various mechanisms have been proposed for this (Miklin et al., 2019, Pitman et al., 2014b, Pitman et al., 2014a, Pitman et al., 2016, Pitman, 2018). The student here, in talking about their colleague’s death, talked about trauma as well as a sense that the university perceived them to be vulnerable in the aftermath.

In various ways through the study there was a sense that suicide was part of the cultural script available to vets, and not only because of the experience of bereavement by suicide; the first exposure to this script predated this and occurred even before vet school. Vulnerability to suicide is affected by a person or group’s beliefs and attitudes to suicide, and it has been proposed that certain attitudes to suicide may act as enablers, increasing suicide risk. Canetto’s cultural scripts of suicide theory suggests that suicide is most likely among individuals and communities where it is expected and considered acceptable. This theory asserts that individuals draw upon cultural scripts around suicide in deciding whether and how to engage in suicidal behaviour (Canetto, 1993, Canetto and Lester, 1998, Canetto, 2008, Canetto and Cleary, 2012, Cato and Canetto, 2003, Canetto, 1998, Winterrowd et al., 2017). This raises questions for veterinary awareness campaigns about suicide and the way veterinary suicide is discussed and written about. There

is sometimes an assumption that talking about suicide is not harmful. Indeed research looking at iatrogenic risk of asking individuals about suicide for research or for clinical assessment purposes has found this to be the case (Decou and Schumann, 2018, Ballard et al., 2013, Blades et al., 2018, Stice and Sara Canetto, 2008). However when this is extended to profession-wide narratives around high suicide rates and risk, it is very different from the context of asking individuals about suicidal thoughts in order to offer support and help. Profession-wide narratives about veterinary suicide are strong and exist outside the veterinary profession too, with dozens of articles about veterinary suicide in the mainstream media in the last 12 months alone. This study suggests that there may be cultural scripting around suicide among veterinary students and veterinary surgeons and in veterinary culture and that this could contribute to veterinary suicide risk.

### **7.2.2 Experiences of mental health**

Many participants talked about experiencing mental health problems. These were presented either by talking about stress, or in terms of a specific mental health condition such as depression, anxiety, anorexia nervosa or attention deficit hyperactivity disorder. Three participants disclosed that they had had thoughts of suicide, and one had attempted suicide during their final years of study. These participants attributed the suicidal thoughts and behaviour to the pressures of final year of vet school and a combination of pressures a newly qualified vet. They reported a reluctance to disclose or seek help, both because of concerns about stigma and because of a pessimism that nothing would help.

Some participants also spoke about moments of reward, joy, satisfaction and happiness during the transition to veterinary practice, and most experienced this around the time of graduation, although for some it was also present in aspects of veterinary work.

There were a number of themes which are consistent with the existing limited research on student and vet mental health. Given the elevated prevalence of poor psychological wellbeing among both students and vets (Bartram et al., 2009a, Cardwell et al., 2013, Hatch et al., 2011, Nahar et al., 2019, Nett et al., 2015b, Platt et al., 2012b), it was not surprising that many participants experienced problems in this area. Twenty-two of the 36 participants discussed concerns about their mental health. Half of these (11) talked about stress and distress rather than a particular diagnosis. This is consistent with previous research that found half of vet students are unsure whether they have experienced a mental health problem (Allister, 2011). In the Veterinary Transition Study it is interesting that a significant number of participants also did not identify as having a mental health diagnosis, but did talk about experiences of mental distress. This may indicate an elevated level of concern about mental health among vet students, and experience of psychological distress, but reluctance to seek diagnosis or treatment. This corresponds with previous research findings where, although the prevalence of mental health diagnosis was similar to the general population, psychological distress, as measured by the GHQ-12, was elevated (Cardwell et al., 2013, Allister, 2011).

### **7.2.3 Mental health in transitions**

This is a study of transition, and the longitudinal nature of this study gave an opportunity to understand mental health through a career transition.

Transitions are inevitable through careers where people occupy different roles over time. Work-role transitions theory asserts that entry into a new role induces personal and, or, role development, with personal development stated as a function of role novelty and the newcomer's desire for feedback, and role development as a function of role discretion and desire for control (Nicholson, 1984). There are difficulties with this model. Ashforth and Saks' (1995) longitudinal examination of this model suggested adjustments including considering personal and role development as interacting rather

than as separate processes, and considering the influence of social factors on role transitions.

Transitional factors which caused stress were identified at every stage of the Veterinary Transition Study. Transitions were experienced as a series of role changes over time, not a single transition from student to vet.

#### **7.2.3.1 Transition from school through veterinary training at university**

Factors associated with stress at transition varied between individuals and over time, but there were common themes. The transition from secondary school to years 1 and 2 of vet school was associated with moving long distances away from prior emotional supports, and a transition of confidence and competence from being perceived as the brightest in one's class to being one of a cohort of equally bright people. There was a mismatch between expectations and reality, consistent with Perrin's (2016) work on veterinary identity. In this study this was seen particularly around the disappointment of limited contact with animals. This study builds on Perrin's finding suggesting that not only is it the confusion around the rhetoric of science and academic excellence, and the reality of vocational care for animals and their welfare, but also direct impacts from limited contact with animals impacting mental health and wellbeing, and animals and expressing care for them, as a potential protective factor for mental health.

In year 3 of veterinary study the most common stressor was the increased volume of work. Clinical rotations and EMS placements in year 4 and 5 were eagerly anticipated, but associated with heavy workload, long hours and some difficult relationships with practice staff. Here mental health was impacted by practical realities of developing professional identity through role modelling and role rehearsal. The final year of veterinary study was felt to be more rewarding because it is more hands on, resonating with findings about identity which prioritised and gave status to practical aspects of veterinary work, particularly surgery, though at the same time perceived increased clinical responsibility was experienced as stressful. Participants also reported



experiences of shaming for lack of knowledge in clinical placements including during university teaching which caused distress:

“I think like every day in vet school, like I was saying to [my partner], like every day is like an exam and every day you feel stupid about something.”

(Interview 17a)

### **7.2.3.2 Transitions at graduation**

Graduating and starting work was experienced as somewhat exciting, particularly at the time of graduation and before starting work, though for many at the start of work this was more frightening or anxiety-provoking than exciting. Immediate stressors at this time were around debt and income. In the longer term, the pressure of clinical responsibility, relationships with clients, an expectation of higher level of skill for procedures, fear of complaints or RCVS investigation, and ethical issues around euthanasia were all identified as factors contributing to stress at the time of starting veterinary work. Similarly to Perrin’s study there was a disconnect for many between the expectations and reality of veterinary work, despite the extensive EMS demands placed on students during training.

Transition to veterinary work is considered to be a particularly difficult time for psychological wellbeing in veterinary careers (Platt et al., 2012b, Platt et al., 2012a). Some consider the period immediately following graduation to be a particularly difficult time. That this study did not find significant deterioration in mental health in the interviews performed shortly after graduation, but did find people at interviews performed 19-27 months following graduation and working in practice experiencing significant work-related stress raises a number of questions, and suggests consideration of timing for interventions and support.

In the first round of interviews, eight students talked about depression. In the second round interviews at the time of graduation, none of these students reported worsening depression, and no other students reported having

developed depression. From a transition perspective, this was interesting. Although potentially major stressors had occurred, final exams, for many moving away from their university city, financial pressures and trying to find a job, those seemed to have been counterbalanced by relief and even joy at completing their veterinary degree. It suggests that the mental health difficulties experienced by new graduate vets may be more to do with features of practice and work than final exams, early financial pressures, and relocation, including international relocation as was the case for four participants in this study at the time of graduation.

#### **7.2.3.3 Transition to being a “real vet”**

A further transition was identified in the study: that of self-identity as a vet. This did not occur at a set time point such as graduation or oath-taking, or even starting work, but rather was associated with an ability to perform procedures and work unsupported, particularly out of hours. This sense of not being a “real” vet until after this point created another challenge to mental health and wellbeing: the very things that caused most stress for recent graduates were the things they felt they had to do alone to be real and authentic in their role.

When considering other safety-critical professions such as medicine, the themes around lone working, sole competence and not asking for help are at variance with the direction of development of postgraduate medical education, which emphasises a period of supervised practice, workplace-based observation, recognising the limits of one’s experience and asking for help early (GMC, 2015).

#### **7.2.3.4 Transition to veterinary work**

In the third round interviews, performed 2 years after the initial interviews, and 19-27 months after graduation, there was deterioration in mental health for a number of the participants. Concerns about stress and mental ill health were experienced by most participants, but the participants who experienced

the most severe difficulties with mental health at this stage were not students who had experienced the most severe mental health difficulties whilst at vet school. It is often assumed from cross-sectional studies on veterinary student and veterinary surgeon mental health that the proportions of those suffering mental health conditions at different career stages are the same small group of individuals, and indeed there is sometimes discussion of screening, and selecting out individuals with prior history of mental ill health. This finding suggests that those experiencing mental health problems at vet school may not go on to be those who suffer the most with their mental health during the transition to practice. Following individuals who had experienced severe mental health concerns at vet school, factors that seemed to be protective for future health were moving back home close to friends and family, prioritising work-life balance and wellbeing when choosing veterinary jobs, and an insight into their own individual needs for wellbeing.

This study found that the vets who experienced the most severe mental health difficulties early in their careers were not those who had reported more severe mental health difficulties as students. This finding has several implications for further research and practice. Firstly, it warrants further exploration to explain this finding. It is possible that early experience of mental health conditions does in fact lead to increased resilience, by mechanisms such as enhanced awareness of self-care, increased awareness of support systems and readiness to use them, and deliberate choices to avoid those areas of practice which are known or suspected to have an adverse influence on vets' mental health. Secondly, it challenges the notion that screening to exclude applicants with mental health needs would improve the overall mental health of the veterinary profession. When taken with the themes of determination to become a vet from childhood and "vet or nothing", it is possible that such pre-admission screening could paradoxically worsen the overall mental health of the veterinary profession: screening would select for those who are least likely to disclose mental health problems or ask for help, and would clearly communicate to a group of people who are remarkably determined to pursue this specific career at all costs that they

would be severely penalised for any disclosure of mental health problems or for any attempt to seek help, by being excluded from a career as a vet.

#### **7.2.4 Veterinary mental health and suicide**

Some participants with mental health problems reported a preference for leaving the profession or changing careers rather than seek help or support. This is concerning and needs further investigation. It is possible that the perception of discrimination which might follow disclosure to either an employer or regulator acts as a substantial barrier to openly seeking help. It may be connected to veterinary identity, and the finding of inflexibility around notions of not needing help: that in order to receive help vets feel they need to divest themselves of their veterinary identity. It may also be that veterinary identity is perceived as a cause of the problems, and that recovering from the problem means abandoning the identity. In Platt's (2012a) study of vets with experience of suicidal thoughts or behaviour, 14 of 21 participants who had experienced suicidal ideation or behaviour had considered leaving the veterinary profession but said that having no alternative career path was the reason they had remained as veterinary surgeons. This sense of being trapped in a profession they no longer wanted to be in resonates with the inflexibility seen in the motivations to study veterinary medicine in this study with no backup plan considered. There is further resonance with literature linking the experience of defeat or humiliation from which there is no escape - entrapment - as a key driver of suicidality (O'Connor and Portzky, 2018, O'Connor, 2011, O'Connor, 2016). Alternatively it is possible that leaving the profession represents a rational and adaptive response to prioritising personal mental health over the hard-to-sustain demands and culture of many areas of veterinary practice.

The fixed "vet or nothing" view in this study seemed to have been set in childhood, long before application to vet school. It was echoed by the student who attempted suicide in their final year at vet school, discussed in the previous chapter, who felt that veterinary study had influenced their suicide

attempt. They said that they felt that suicide risk was a worthwhile collateral cost of pursuing a career that was all that they had ever wanted to do. The interaction between feeling unable to pursue a different career from the outset, and then feeling able to leave that career and feelings of entrapment and hopelessness at times of difficulty needs further exploration.

In understanding veterinary suicide, one of the debates that has occurred is whether veterinary suicide risk is solely due to access to means of suicide - through veterinarians' access to potentially lethal medications and firearms as part of their work. Participants' experiences in this study did not fit with this idea. Both students who had experienced suicidal thoughts and behaviour said that they felt veterinary study and training, and "being a vet" was a direct contributor to the suicidal thoughts or attempt. This is in keeping with Platt's findings, where veterinary surgeons with experience of suicidal thoughts and behaviour often linked this to their work (Platt et al., 2012a).

In this study the two participants who experienced suicidal ideation in final year of veterinary training did not use veterinary means in their plan or attempt. One participant considered using a veterinary-access-specific method, but chose not to. Both emphasised veterinary related factors other than access to means such as pressure at work, long hours, social isolation, interpersonal difficulties with colleagues, and a mismatch between their workplace expectations and their own professional identity and values. Further research would be necessary to investigate whether access to veterinary means of suicide represents a risk factor for mental health problems in its own right, or whether its role in veterinary suicide represents cognitive availability, familiarity, access, and the final stage of enactment in response to many other prior stressors and risk factors.

In considering the influence of access to means, veterinary students do have more restricted access to means of suicide than some veterinary surgeons, however both the suicidal plan for one student and the suicide attempt for the other occurred during their clinical year when they did have access to medications whilst seeing practice or on university placements, and neither

student used a veterinary means for their plan or attempt. The student who attempted suicide overdosed on human medication which they did not access through their work, and the student who planned to end their life planned to do so with prescribed human psychiatric medication. Previous analysis of suicide methods used by vets have suggested elevated rates of death due to poisoning by solid or liquid substance compared to the method of suicide used in the general population, and this had been used to suggest that vets are using veterinary means, and to emphasise the importance of access to means in veterinary risk. This has a number of implications. Veterinarians who are known to be suicidal are often recommended to have restricted access to euthanasia drugs at work, which can in turn mean restricting their work. The UK veterinary regulator, the RCVS, has a role in enforcing this for some vets through undertakings as part of their Health Protocol. Vets who are thought to be unwell are required to agree to undertakings, one of which may be that they cannot access certain types of drugs. This study found that although both students would have had access to euthanasia drugs, neither planned to use them in suicide attempts, but the participant who considered suicide as a new graduate did consider using veterinary means including equipment and medicines from work. This emphasises the importance of individual risk assessments and support in veterinary suicide prevention and the risk balance of restricting a veterinary surgeon's work to reduce their access to means of suicide, the amalgam of personal and professional identity bound up in work for veterinary surgeons, and the difficulties when identity is challenged. This area warrants further detailed exploration and research as means-restriction is a useful tool in suicide prevention more broadly (Chen et al 2016) but, for vets, associations and fears around loss of work identity and threat to career or ability to work unrestricted, and possible stigma and shame, may increase risks too.

There may also be differences in intent between lethal and non-lethal attempts. In terms of intent to die one of the students in this study who made a suicide plan expressed some ambivalence about death, however the other appeared to have a strong intent to die when they attempted. There may also

be increased risk to vets from knowledge of pharmacology rather than through access – which again raises questions for current efforts to control access of vets who may be suicidal by restricting their work, as their knowledge of means may enable them to substitute methods.

### **7.2.5 Stress**

Stress was described in terms of both emotional and physical symptoms. This experience was associated with stigma and a reluctance to be seen as “stressy” or “flaky” leading to a reluctance to disclose or seek help. Although as described in Chapters 3 and 4, “stress” was used to denote a wider range of experiences than might be covered under formal definitions of stress, including experiences of a range of mental health conditions.

#### **7.2.5.1 Stress at transition to vet school and during vet school**

Factors identified as causing stress included the pressure of vet school, including self-pressure and family expectations, isolation – both being away from pets, friends and family, and the geographical isolation of the vet school campus away from friends who were studying other subjects.

#### **7.2.5.2 Stress at starting work.**

Stress at the time of graduation was minimal. At the commencement of veterinary employment common factors identified as stressful included the long hours, difficult relationships at work with colleagues or clients, and ethical concerns. Protective factors for stress included moving closer to friends and family, prioritising work-life balance, and choosing jobs or areas of practice specifically for support and wellbeing.

### **7.2.6 Mental health influences**

This study generated several themes which have not been previously examined in veterinary student or professional mental health. Given the consistently reported centrality of contact with animals to motivations for working in veterinary practice found in this study, it is surprising that there has been little research examining the relationship between this and mental health. This study found that participants' relationships and bonds with their own animals were reported as an important source of support and comfort for both students and vets, and that separation at university was a source of stress. The low level of contact with animals in the first few years of veterinary study was reported as a surprise and disappointment by many participants. This was also identified as a transitional issue: participants reported benefits from returning to taking care of their own animals after graduating, or of getting new pets or animals when they were no longer living in student accommodation.

Participants discussed the interaction between mental and physical health: stress worsened medical conditions, and medical conditions or injury had a negative impact on mental health. Other negative factors for student mental health included pressure from self, the university, family and exams, being away from friends and family, and a lack of time to maintain activities and interests which supported wellbeing.

Some vets reported that starting work had had a positive impact on their mental health. Concern about stigma and professional conduct investigations was identified as a barrier to help-seeking. It was more common for participants to report considering leaving a job or clinical veterinary work in the interests of their mental health, rather than seeking help from NHS services for their mental health.

New graduates and early career vets identified negative factors such as debt, accommodation problems, being unsupported, difficult procedures and difficult consultations, time pressures and the impact of veterinary work on



other areas of life. A major theme was levels of responsibility which were not commensurate with their experience.

Some participants discussed gender discrimination and sexual harassment. By the time of the third round interviews at 19-27 months after graduation, some participants had taken on substantial senior management responsibilities, which they felt were beyond their experience or capabilities, and were also identified as a negative factor for mental health.

Positive factors included a shared strong sense of values and beliefs about what it is to be a vet, moving closer to cherished pets, friends and family, and the presence of support where it was available, including both local and online peer support. Veterinary identity seemed to both support and undermine wellbeing: there was an expectation of stress, struggling to cope and suffering as inevitable with transition to practice.

### **7.3 Veterinary students' and new graduate vets' expectations and experiences of veterinary work and support in entering employment**

#### **7.3.1 Expectations**

For many participants there was a sense that veterinary work had not met expectations, a finding that mirrors work elsewhere such as the Vet Futures Study (Vetfutures, 2015) which found that half of new graduates felt that veterinary work did not meet their expectations.

Perrin highlighted a mismatch between expectations of veterinary careers and the reality (Perrin, 2016). The Veterinary Transition Study found that most participants described an expectation that the first few years would be more hands-on than they found them, concern about not fitting in and an expectation that vet school will be hard work. Subthemes generated around the experience of vet school were of stress from multiple sources, positive and negative social aspects such as being a tight-knit community but very competitive. Participants had an expectation that study and negative impacts of the course would affect other areas of their lives. Linked to expectations

around inevitability of stress and mental health problems this raises questions about inevitability and expected narratives, and to what extent these may be acting as cultural scripts, affecting likelihood of and responses to adversity.

Expectations of the transition to working as a vet included excitement, stress, responsibility, hope for support (though with uncertainty and low expectation), long hours and ethical dilemmas.

### **7.3.2 Moral distress**

Participants talked about a growing awareness of professionalism and ethical dilemmas, particularly related to client interactions, and concerns about practice in EMS placements. Ethical dilemmas, concerns about practice and the impact on wellbeing and mental health have not been widely discussed in the veterinary research literature but have been extensively discussed in parallel fields such as medicine and nursing. The concept of moral distress, in Jameton's (1984) influential definition and description has resonance for this study too:

"Moral distress arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action"  
(Jameton 1984, 6)

This definition of moral distress has been widely discussed and refined (Ulrich and Grady, 2018), and three key elements have been suggested

- The distress arising when a person believes they know the morally right thing to do (or not to do) but their ability to do this is constrained by internal or external factors
- The distress comes in two phases: initial distress at the time of the potential action/inaction and later reactive distress in response to the initial episode
- The distress involves the compromise of a person's moral integrity or violation of core values (Campbell et al., 2016)

Campbell and colleagues also suggested an extension of this definition to include six other cases of distress which, while not fitting the traditional definition of moral distress, they felt were relevant in the medical case examples they gave. These six types of distress were: moral uncertainty, mild distress, delayed distress, moral dilemma, bad moral luck and distress by association (Campbell et al., 2016).

In the Veterinary Transition study potential moral distress was seen in a number of ways. As a student it was experienced on EMS and clinical placements, and for some this had an impact on future career decisions:

“The only thing I wasn’t aware of was the referral side of things, and how far they can push things. And I found it quite a shock, so going over there and seeing some of the animals that I would have thought would have been put to sleep elsewhere, but they sort of prolong the life and try and keep it... Obviously they’re trying to do the best for them, but sometimes we see the suffering side of it [...] I found that a bit shocking. And then I went to a different referral centre because I thought initially that I’d like [particular type of] medicine and maybe think about doing [type of] medicine. And it’s the same there.”

(Interview 9)

It was also described as an unresolved source of conflict with clinicians:

“We had a dog that was in awful, like I have no idea why we were keeping it alive, and it had progressive neurological signs, [...] And it hadn’t eaten in weeks, and I basically was like ‘I think we need to start feeding this dog, I think we need to do something, I don’t think we’re making, you know, what are we...’ I think I said something like ‘oh I think we should start feeding this dog’ and the response I got back was like ‘how dare you question my clinical judgement. What makes you think you know better than me?’ and I really didn’t feel I approached it that way, I really felt I approached it in, you know, ‘I really care about this patient...’ [...] And the feedback, she told me, she was like ‘I think you’re incredibly arrogant’ and that is certainly something no-one’s ever said to me before.”

(Interview 21a)

Others discussed how this raised multiple issues when they saw things they were uncomfortable with during training, and raised other conflicts including how the requirements for training – completing 38 weeks of clinical EMS during study - and whether they would be able to see practice there again had a bearing on how they could respond:

Participant: If you're being supported and being taught things that aren't the best way to do things... I don't know. It'll be quite a kind of ethical or moral conflict as to what you'd do in those situations. [...] When I was on EMS we were at a practice where they were castrating calves, but it was like the practice owner's kind of standard protocol, like he didn't use local anaesthetic because he felt it was more barbaric to inject with local. He felt they reacted more with that than they did to the scalpel. So like when they offered me a chance I kind of, I'd never castrated a calf before so I did it, but again I kind of felt a bit of a conflict that ideally I would like them to use local. But...

Interviewer: Yes. And did you feel able to say that on EMS? Or did you just...?

Participant: Not to the... Kind of subtly. Well I didn't say 'I'm not going to do this unless I can use local' but I just asked why. Like 'why don't you use local?'

Interviewer: Yes.

Participant: And that was it.

Interviewer: Yes.

Participant: But you can't really push any more because you don't want to create a bad impression and you want to be able to go back and... I don't know. It is difficult, you're put under pressure.

(Interview 16a)

This was an influence on mental health, wellbeing and decisions about careers including staying in practice throughout the study. One participant in the third round interviews talked about a decision to do less small animal work and focus on another area:

Participant: And another thing I really can't cope with on the small side is brachycephalic dogs. I just can't...

Interviewer: Is that the welfare issue?

Participant: Yes. I just can't stand it when dogs are sitting there trying to... in respiratory distress and that's just considered normal and you get people cooing over them and saying 'oh I'm going to breed this' and you think... And I always try and tell people, like I always make a point of saying to them, in a nice way, I say 'look, this is what they're bred for and it's wrong', you know. But I think I'm one of the few vets that tells people how it is, but like I've just given up with it.

(Interview 08c)

The distress experienced by participants has implications for veterinary training too. Not only were difficulties experienced on university clinics and EMS, but a number of participants described difficulty at the dissonance between what they were taught at university and realities in practice:

Participant: I think that it's... [...] you know, I understand where they come from and that they need to have [...] these cost-cutting measures, but, you know... It's just, to me, still quite barbaric, the way they'll cut off... they'll castrate a bull but they'll just give him a shot of penicillin afterwards, you know.

Interviewer: OK, so not using analgesia and those sorts of things?

Participant: Yes, you know, it's just...

Interviewer: And how does that feel when you see that happen?

Participant: I just... it shocks me because our goal and our driving force should be for the welfare of the animal – it should be number one, in fact it is number one in our oath. So it just shocks me when it's actually not, you know.

Interviewer: Sounds like there's a real dissonance there between what we say we're doing and then what you see?

Participant: What we do, yes. Yes. And I think that's true with small animal medicine too, you know, you have the 'vet school way', where you want to run all the diagnostics before you treat, or you use the better equipment. Like for example, here they don't use cat-gut, but every practice that you see around will use cat-gut. Well I can't say every practice, but, you know, most practices. So obviously, you know, and we get taught cat-gut is bad because it does this, but still we use it in practice.

Interviewer: Right, sure.

Participant: So there is that disconnect.

(Interview 35a)

These experiences of moral distress covered a range of veterinary work, including seeing practice, university clinics and practical teaching, working in practice, and other veterinary scenarios. They were common and volunteered by participants throughout the study. Accounts suggested that they may have an impact not only on distress but also on career directions, attitudes to veterinary work, and possibly job attrition. This area warrants further attention.

### **7.3.3 Experiences of work**

Experiences of clinical work placements especially EMS, as also found by Perrin, were important in role rehearsal and role modelling, and also seemed to be important in acculturation and professional socialisation. Some of these

experiences were positive however others appeared to teach aspects of veterinary culture with negative impacts for wellbeing:

“[The EMS placement] was at an equine hospital and they were just horrendous to you [...] they didn’t make you feel welcome, they didn’t tell you what was happening, and then, oh, they were just horrible people. Like they were really bitchy to each other, like even in the, like they were unhappy, like the setting itself was unhappy, they didn’t like each other, and I was there for a month and I just hated it. And then I was like, so I did on call of a night as well, so they also, they were like ‘oh you have a flat to live in’ – I mean it was actually just like a room and there wasn’t any cooking or stuff, they had like a microwave, it was horrible, really horrible. And so I was doing on call each night and then at the end they were like ‘oh’, I said ‘oh, I want to have Sundays off’ and they were like ‘oh you can’t have Sundays off’, and I was like ‘well in the contract you made me sign it said you can have Sundays off, I’m taking my Sundays off’ and they were like ‘we have to find cover’ and I was like ‘find cover from where?’ “

(Interview 15a)

I went on to ask whether this was paid work, as having mentioned a “contract” I was unsure of the status of this “externship” – a term sometimes used for EMS placements that are a month or more:

Interviewer: Right. And were you being paid?

Participant: No. They just expected you... so I did on call each night and Saturdays and the Sunday night and then I drove home on the Sundays and I was like ‘oh I’m not doing it.’

Interviewer: So when you were on call were you doing actual work that someone else, you know, they’d paid someone else to do? Was it that kind of work or..?

Participant: Yes, sort of, you were doing like colic checks and all of that. And their reasoning was that they’d had their equine, like they’d have their surgeon who would scrub in and then they didn’t have enough, they’d only had one nurse on so they had to have, they

wanted a nurse out, not scrubbed in, and then they didn't have anyone else to come in. So their reasoning was that the extern [the student] had to be there to scrub in to any emergencies, which is stupid, it's completely wrong and backwards and... And then of course they were like 'oh that's a bad attitude to out of hours' when you've done 7 nights a week on call for them, and it's just like rubbish.

(Interview 15a)

This acculturation to norms of veterinary practice through EMS is not well described in the veterinary literature but warrants further attention. Perrin (2016) found that the authenticity of the setting for EMS placements meant that they were crucial for trying on the role of being a vet, and in her study found that the most profound learning throughout vet school occurred during practice placements. This is discordant with RCVS policy and guidance (RCVS, 2010) which suggests that veterinary schools are wholly responsible for learning and that the role of EMS is to provide opportunities for students to practice what they have already learnt. As evident from the experience above the reality of EMS placements was different, and varied drastically within the Veterinary Transition Study. In some cases they were effectively unpaid labour, with contracts and expectations of significant out of hours work responsibilities.

Analysis of accounts of experiences of vet work generated subthemes of shock, feeling let down or cheated regarding support, employment practices that adversely affected wellbeing, and gender discrimination and inequality but also feeling valued by contributing. There was also the impact of work on both physical and mental health, including workplace injury.

#### **7.3.4 Expectations of support**

There was a dissonance between aspects of practice which vets wanted support with, the aspects which they identified as being part of veterinary identity, and those aspects which they identified as being most stressful.



Instrumental support with veterinary clinical work was considered desirable up to a point, but there was a strong sense that they should be able to cope alone and that needing support was being burdensome.

Although clinical concerns were raised as an area of stress, when discussing factors causing stress, participants spoke far more about long hours, difficult client relationships, ethical issues, difficulties around euthanasia, and the pressure of managerial responsibilities. These were not factors that participants commonly received support for, despite describing areas where instrumental and emotional support may have been of benefit. Seeking support for these areas, when it occurred, was primarily emotional support from family, partners and more rarely veterinary friends rather seeking instrumental or emotional support at work. This raises a question about whether support was not sought because of perceived unavailability, stigma at support seeking, perceived incompatibility of seeking support with veterinary identity, or because of cultural narratives and a sense that these factors were an inevitable part of veterinary work that must be tolerated.

### **7.3.5 Experiences of support**

Participants reported receiving emotional and instrumental support at university from family and friends, both vet students and non-vet students, who could offer different perspectives. Some participants had accessed support from the university and the NHS, including personal tutors, the peer support scheme, university and NHS counselling, their GP and mental health services. Participants reported several barriers and enablers around seeking support. These included negative attitudes towards seeking formal support, including a perception that it represented failure, that it would not be helpful, that others were coping with worse problems, and a fear that their problems would be disclosed to academic staff or lead to adverse consequences.

Although pressures of veterinary training, concerns about support following graduation and the transition to practice have been discussed in the research literature, this study identified more specific factors behind this. Participants

identified several ways in which the structure of the university course can enable or inhibit access to both formal and informal support. It is notable that participants valued and spoke about informal emotional support from both vet and non-vet friends, family and companionship with pets as much as formal avenues for support. Time pressures, EMS placements, timing of examination resits, and the geographical isolation of the vet school were all highlighted as addressable factors inhibiting access to informal support. Two participants directly attributed their suicidal thoughts or suicide attempts to the pressures of vet school, and one to a lack of support in practice. Specific factors including failure to provide expected support, a perception of being a burden, isolation and a mismatch between experience and responsibility were among those identified by participants as underlying the transition to practice.

Where a relationship with personal tutors existed, this enabled access to support, and where the students felt they were not known personally to personal tutors this acted as a barrier. The timing of resit examinations and EMS placements represented a barrier to students returning home during the holidays to access family emotional and instrumental support. This resulted in greater costs to some students and unmet emotional needs. The very visible location of the counselling service office in the university building was also described as acted as a barrier to visiting, as did concerns regarding confidentiality and disclosure to personal tutors.

When starting work, participants reported hope that they would be supported and a worry that asking for support would make them look “silly”, again suggesting that fixed ideas of how a vet should behave are incompatible with support seeking. This idea of identity moderating whether support is sought or accepted is important, and is explored later in this chapter. Subtheme analysis around what helped with support at work included: job shadowing, the ability to ask questions, a phased start, access to advice when on call, a supportive boss and colleagues, support for CPD, and support from friends and peers including remote, technology-enabled peer support. Subthemes regarding what doesn't help included a heavy workload, long hours, no

breaks, interpersonal difficulties with colleagues or management, understaffing, and excessive criticism from more senior colleagues.

Despite ambivalence about seeking support - perhaps connected to veterinary identity - being let down was developed as a theme from accounts of support as a new graduate and in veterinary work. This related to the absence of support which participants felt they had been promised, staffing changes leading to excessive clinical or managerial responsibility or demand, and a lack of development opportunities.

There was a dissonance between aspects of practice which vets wanted support with, the aspects which they identified as being part of veterinary identity, and those aspects which they identified as being most stressful. Although clinical concerns were raised as an area of stress, when discussing factors causing stress, participants spoke far more about long hours, difficult client relationships, ethical issues around euthanasia, and the pressure of managerial responsibilities. Many of these factors were reported by participants to be inevitable and part of the job, and some, particularly long hours and pressure of work, were bound up with identity-related expectations of work. It may be that acculturation to a veterinary identity of long hours, pressured work and difficulties with clients, leads to a perception that these factors are outside one's control, and consequently they are experienced as more stressful.

In a longitudinal study of the transition from university to work, Haase et al. (Haase et al., 2012) looked at measures of wellbeing and occupational motivation using motivational theory (Heckhausen et al., 2010). In the Motivational Theory of Life Span Development, goal engagement and goal disengagement are two basic aspects of motivation. People can disengage from a goal by withdrawing motivational commitment, lowering aspirations, and finding self-protective attribution or they can engage with a goal and change through seeking support, investing time and effort, overcoming obstacles and use supporting metavolitional strategies such as enhancing control beliefs (Haase et al., 2012, Heckhausen et al., 2010). Haase found

that increases in occupational goal engagement were associated with increases in a number of aspects of wellbeing and increases in occupational goal disengagement were associated with decreases in a number of aspects of wellbeing.

In this study, feeling let down was associated with poor wellbeing, and in some cases with disengagement from work. Further analysis of this experience from theoretical perspectives may help to answer questions about attrition from veterinary practice.

One of the most prominent themes, featuring in most participant accounts, was the mismatch between responsibility and experience. This included issues of sole charge working, a normalisation of excessive responsibility, and its negative impact on the mental health of newly qualified and early career vets. In contrast with extensive literature on induction and onboarding it seemed that veterinary workplaces, although promising instrumental and organisational support at the time of starting work, were variably or only partially delivering this. This had implications for wellbeing and was a major source of stress and distress at the time of transition to practice.

This experience though common was not universal and some participants described in-practice support which they felt met their needs:

“They’ve been fantastic. They said to me at the start that they’ve had new grads before and they’re quite used to it and they’re happy for me to just ask questions, they know there will be a lot of questions at the start. And they kept stressing that they were more than happy for me to come for help. So I basically did that quite a lot in a lot of my first consults, I would find a reason to get the dog out to the back, where there would always be another vet floating around and I could get a second opinion.”

(Interview 26b)

### 7.3.6 Support and veterinary identity

As already described, one of the features of the veterinary identity which participants developed through this study was a sense that veterinary identity involved being autonomous, and not needing support. This sense developed despite it being at odds with the advice from universities and other veterinary organisations that seeking support is important. This raises interesting questions: does veterinary identity moderate whether people will access support and, if so, what implications does it have for interventions? Simply providing more support may not help unless alternative cultural scripts of what it is to be a vet, that include support seeking and receipt of support, are available and are considered authentic and valuable.

Examining this idea of veterinary identity moderating support seeking, I considered Karasek's (1979) model of job strain (Karasek 1979, Karasek and Theorell 1990). This postulates that psychological strain results not from a single aspect of the working environment but from the joint effects of the demands of a work situation and the range of decision making freedom available to the worker facing those demands, representing the instigators of action (workload demands or conflicts) and the constraints on the alternative resulting actions. It states that job strain occurs when job demands are high and job decision latitude is low, and that job strain relates to mental strain. The qualitative data in this study suggested that for the veterinary participants in this study, another factor, that of professional identity, moderated the impact of job demands and job decision latitude on job strain and subsequent mental strain. This is expanded further in the integrated model in Section 7.4.4. Veterinary identity in this study, when manifested as a sense of inevitability of stress and difficulty, omnicompetence and rapid progression to lone working, self-reliance, and perception of weakness at needing to ask for help, moderated how participants perceived job demands and how they responded to them. Those who felt stress was inevitable and that being a vet required them to be able to work unassisted were less able to respond to workload demands than those who felt that being a vet did not

preclude them from asking for and receiving help, or having reasonable expectations around workload.

Job control or discretion as described in Karasek's job strain model also related to veterinary identity. Those whose sense of veterinary identity allowed some scope for challenging veterinary culture around hours or working patterns or asking for help were able to exert greater control over their working environment. People in similar roles with apparently similar levels of job decision latitude were sometimes constrained by veterinary culture, expectations and their sense of identity.

Further analysis of these data alongside Karasek's job strain model may be of interest to understand the impact of veterinary identity on job strain, mental strain, and veterinary mental health at work.

## **7.4 The development of professional identity in veterinary students and new graduate vets as they move from study to employment, the third aim of this study**

### **7.4.1 The development of veterinary identity**

Veterinary identity in this study was formed through a process of development, the influences for which started well before university. Influences ranged from socialisation, personal and group expectations, occupational culture, role rehearsal, role modelling, and legislative and professional context.

### **7.4.2 The veterinary identity**

The identity that early career vets in this study developed through transition started early, often in childhood even for participants who were completing veterinary medicine as mature students for a second degree:

“You could argue that for the last, like since I was like fourteen I’ve been working towards being, like that has been my life.”

(Interview 06a)

It was characterised by this early age of motivation, a high level of commitment to achieving that goal, and inflexibility over career: “vet or nothing”.

The sense of having become a vet only occurred at a set point of competence which was remarkably uniform across participants. This wasn’t at the time of graduation, taking professional oaths or at starting work but was associated with a state of professional autonomy, being able to perform certain procedures unassisted. These procedures were surgical for most participants and aligned with a strong sense that to be a vet was to be a clinician and a competent surgeon, and that other aspects of veterinary work were given lower status early in one’s career.

This independent, autonomous vet, managing alone, not needing help or support was also inhibited from asking for help or support if needed. Needing support was experienced as being burdensome.

There were strong values too: hard work, caring, responsibility (and managing that independently), giving things up for vet, intolerance of failure. These values were adopted early - during study and sometimes before - and were part of professional socialisation:

“I’ve got a friend who thinks that if you’ve not ruined your life at your job then you’re not a good vet, and that’s like reflection of... I know a few people like that, that it makes you a bad person or a bad vet.”

(Interview 12a)

This identity conflicted with wellbeing, particularly through maladaptive strategies such as not seeking support but also through cultural narratives

about the inevitability of stress, and suicide as a script that could form part of veterinary careers and lives.

While the existing literature has discussion about “perfectionism” as a personality trait or cultural factor affecting veterinary mental health, this study generated a theme of “intolerance of failure”. The distinction is that of trying to avoid a negative consequence rather than aiming for a positive goal: participants spoke more of fearing and striving to avoid failure – such as failing exams, making mistakes or being shamed by tutors or senior colleagues – rather than striving for perfection. This has the potential to challenge the existing discourse around perfectionism by positioning this factor as an extrinsic, cultural one – a professional culture in which faults and errors are to be avoided for fear of punishment or shame – rather than an intrinsic personality factor which is related to the recruitment of perfectionist students and so cannot be changed.

#### **7.4.3 Veterinary identity and mental health and wellbeing**

Aspects of the veterinary identity found in this study were linked to both benefit and harm in mental health and wellbeing. Being part of a community of practice was a positive factor. The effect of other aspects were more mixed. For example, the strong sense of having to work independently without asking for help could be positive when associated with a sense of mastery, but was negative when associated with a fear of asking for help, feeling overwhelmed or feeling out of one’s depth.

This polarity in the effect of identity was also reflected in the expectation of hard work. This expectation encouraged vets and students to meet the requirements of study and work, but the perception of hard work as inevitable may cause vets and students to attempt to manage intolerable workloads without complaining, and cause them to believe that they are failing or inadequate, rather than to recognise that the demands being made of them are unacceptable. It may also contribute to the inhibition of both emotional



and instrumental support-seeking observed in the study. Similarly, developing an identity in which stress and physical injury are perceived as inevitable aspects of veterinary work may cause vets to tolerate risky working conditions and inhibit consistent introduction of safety mechanisms.

Among the findings related to veterinary identity and motivations, there was a striking mismatch between “acceptable” narratives related to science and public health, and the desire for contact with animals as both a motivation for qualifying and working as a vet and as a contributory factor affecting participants’ mental health. Although most participants reported that contact with animals was a strong motivator for becoming a vet, that the limited contact with animals in the first years of vet school was a disappointment, and that the presence or absence of their pets or other animals had a strong influence on mental health, love of animals is absent from much of accepted professional discourse and from the literature on veterinary mental health. This is potentially an important profession-specific factor influencing both veterinary professional identity and mental health. It corresponds with Perrin’s findings about animal care and welfare being principal motivators which were silenced in veterinary discourse about elite academic achievement and science. Contact with animals and human-animal bonds as a factor in supporting vet mental health and professional identity warrants further exploration, in terms of both the value of personal companion animals and also the issues associated with compassion for animals as patients.

This study found that development of veterinary identity was a longitudinal process with no discrete transitional point. Identity themes generated were the process of developing identity, values, the conflict between identity and wellbeing, and influences on identity. Many participants reported a determination to become a vet from childhood, a firm commitment and an “all or nothing” attitude towards becoming a vet. Self-identification as a vet was associated with feeling competent, particularly at unsupervised lone working and being able to perform certain specialty-specific operations. Values developed before graduation and included hard work, responsibility and independence, caring, the relinquishment of personal wellbeing, high

achievement and intolerance of failure. The conflict between identity and wellbeing was a common theme and was associated with a feeling of burdensomeness towards employers as a new graduate vet with limited experience. Influences on the development of veterinary professional identity included personal and group expectations, culture, role modelling and normalising giving up things that had previously mattered to them.

Several findings related to veterinary professional identity are novel and carry significant implications for modifiable risk of mental health problems and suicide. The theme of “vet or nothing” was striking and participants reported implications for suicide risk if they were to be unable to practise as or identify as a vet. Participants reported a preference for leaving the profession rather than seeking help or disclosing mental illnesses. This is concerning and warrants further investigation of barriers to help-seeking, including the response of employers and professional regulators to disclosure of mental health problems.

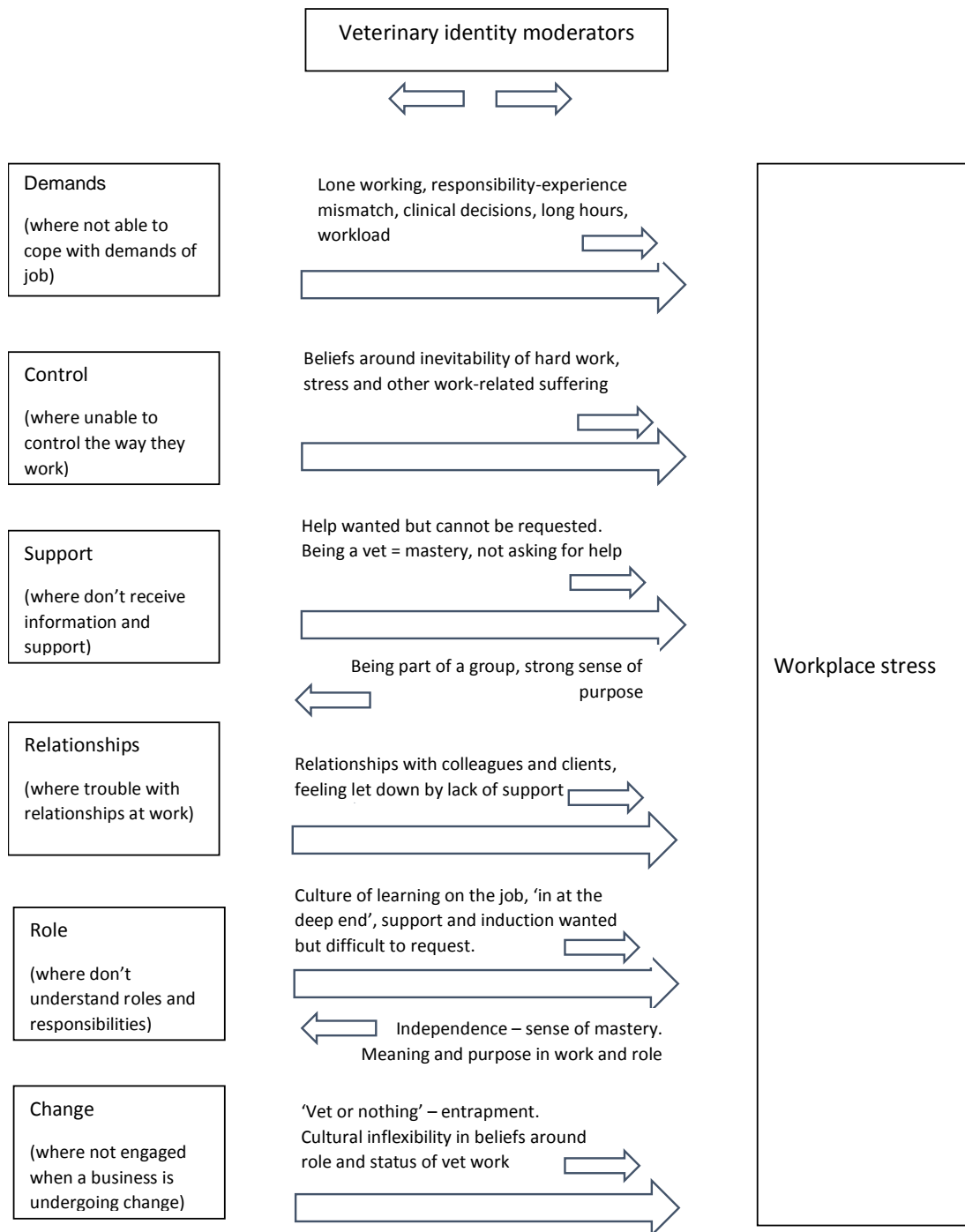
The sense of personal and professional identity as inseparable has been described in other studies of vets with experience of suicidal behaviour which found that vets who had attempted suicide or experienced suicidal thoughts had wanted to leave the profession prior to the attempt but had felt that they could not - that there was no other option for them apart from being a vet (Platt et al., 2012). One participant's experience of suicidal thoughts was quite sudden in onset, and did involve veterinary means. It does suggest that for some, concern over veterinary access to means of suicide at times of crisis may be justified.

It is notable that participants reported that self-identifying as a vet did not occur at the point of graduation or starting work, but rather occurred after a long time in work. They reported that adopting a professional identity as a vet was closely linked to being able to perform specific clinical procedures and practice unsupported out of hours or in sole charge of a practice. There was a dissonance identified between participants' expectations of and hopes for support and supervision (including their sense of feeling let down if this were

not provided), and their perception that identifying as a vet required not asking for help and working without support. Participants' accounts of being let down by senior colleagues, expected to take on clinical responsibilities beyond their level of experience, and of employment practices such as repeatedly letting vets go at the end of their probation period before they can accrue employment rights, gives cause for concern and warrants more systematic investigation into the prevalence of such practices.

#### **7.4.4 Integrated model of the effect of veterinary identity on veterinary stress**

Further developing the work of Karasek (Karasek 1979, Karasek and Theorell 1990) a commonly used model of workplace stress is the Health and Safety Executive Management Standards (HSE 2019). This approach is widely used and incorporated into workplace health and safety planning and risk assessments across industries. The model postulates that six factors affect workplace stress if not managed properly. They are: demands, control, support, relationships, role, and change. Developing this model further the integrated model proposed here looks at how veterinary identity may modulate the influence of these factors.



**Figure 1: Integrated model of the effect of veterinary identity**

## 7.5 Strengths and Limitations

Veterinary research is generally dominated by quantitative methodology, with a lesser focus on qualitative methods. Veterinary readers accustomed to quantitative methods may have concerns about generalisability of a qualitative study. Among the strengths of this type of exploratory qualitative research is its ability to identify findings which may not have been considered or looked for in quantitative research. In qualitative terms, this was a study with a large number of interviews. Analysis included all of the data. However, only some of the findings are presented here because of limitations of space.

This study was unique in that when it was started there was no previous qualitative research on the topic of veterinary professional identity, and although there has been other work on veterinary identity during this study, none has looked specifically at the interaction between veterinary identity and mental health.

The prospective longitudinal qualitative design is not just unique in veterinary identity research but also relatively under-used in qualitative research as a whole. The design allowed for the examination of transitional and developmental factors and demonstrates the feasibility of this design.

The study reached saturation and had a high retention rate. Factors which supported retention included work to build a relationship of trust with each participant, attention to confidentiality, and assuring participants that they would not suffer detriment from being open and honest. It also benefited from an extremely motivated participant group who were enthusiastic about the study and generous with their time and commitment to interviews and staying in touch.

My position as a researcher, and also as a member of the veterinary community, known to be involved in a national veterinary helpline and having lectured the participants on veterinary wellbeing in their first year of university represented both a strength and a limitation. My position may have increased participants' trust by seeing their interviewer as a trustworthy figure who has

an understanding of the profession from personal experience. It may also have viewed me as part of the veterinary establishment or part of the university faculty, which may have inhibited or changed what they said to me. The fear of detriment for discussing personal mental health issues was apparent during the interviews and it is not possible to be fully confident that participants were completely open and honest, and not expressing what they saw as desirable viewpoints about the issues being investigated.

It was notable that several participants volunteered for the study after their friends recommended it as a helpful experience. Participants' motivations appeared to extend beyond the opportunity to participate in research, however it was not clear exactly what were they finding helpful. It is possible that some participants saw the interview as an opportunity to reflect on their own mental health and careers in a therapeutic or development-focussed way.

Building rapport during the first round of interviews was easier because these interviews were conducted face to face, and this was likely an important factor in maintaining high retention rates. The geographical dispersion of participants meant that it was not possible to conduct the second and third rounds of interviews face to face. Telephone interviews therefore represent both a strength, in supporting a high retention rate, and a limitation, in limiting the quality of rapport and ability to use and respond to visual cues during the interview.

The end point of this study was still a time of substantial change in professional identity and further longitudinal research with this cohort would likely develop understanding of professional identity and mental health further.

Issues raised by participants during the first round of interviews resulted in some changes being made to the structure of the university course before the study had been fully completed and analysed, on the grounds that there were important issues which needed to be addressed and had relatively straightforward solutions. However this meant that the study unintentionally

acquired an element of action research. For example, some students reported that lecturers were scheduling teaching outside standard teaching hours, including on Wednesday afternoons which were protected for sport, and some clinical tutorials scheduled for 0700 or 0800 on other days. The vet school administrators were unaware of this and it meant that some students were unable to participate in their usual sporting activities, and had implications for participant responsibilities such as child care and rest.

Having informed the vet school, action was taken to try to further protect leisure time for final year students during the study. I made the decision to do this after participants reported distress, and adverse personal consequences when describing it. Students also disclosed that in some clinical rotations they were expected to work all night then, having handed over in the morning they were then expected to present cases at clinical rounds later during the day, which had limited educational value and contributed to substantial fatigue. This was also fed back to the vet school and was changed. Another relatively straightforward change was that students reported that there were no blackout curtains in the on call room which made it hard to sleep, and that the building fire alarm test was occurring during their rest period; again these were reported and addressed during the study. One participant who suffered a medical condition explained the lack of blackout curtains along with night working and sleep disruption had an adverse impact on their condition. These types of changes may have contributed to a change in relationship between the researcher and participants, whereby participants who were afraid of reporting problems for fear of career detriment hoped or expected that problems would be addressed if they were reported through this study, if they had become aware that the study may have influenced these changes.

## 7.6 Questions Arising from this Study

Several questions arise from this study, where gaps in the existing literature have been touched on but not fully addressed. Participants' experiences of gender discrimination and sexual harassment were developed as a

subtheme in this study but not fully explored. The prevalence of such practices and the impact on veterinary mental health merits further research.

This study highlighted some elements of cultural narrative in the veterinary profession which may serve as risk factors for poor mental health and suicide, and merit further exploration. The themes of expectation that veterinary study and work involves hard work, and that stress is inevitable, risks leading to a sense of inability to change. When coupled with the perception that disclosing mental health problems risks one being seen as problematic, it is possible that a cultural narrative develops which frames systemic problems of unmanageable workloads as individual problems of weakness or inadequacy, thus discouraging both individual help-seeking and systemic efforts to improve or challenge working conditions. The narrative of a vet as being an omniscient lone worker who does not need to ask for help can also be problematic for mental health, and a barrier to accessing adequate early career postgraduate training or supervision, despite many participants hoping for help and support, and expressing strong feelings if this did not emerge.

The geographical context of the development of veterinary identity in this study was a large city university where some students lived in mixed accommodation with non-vet students, some lived alone and others exclusively with vet students, but the veterinary campus was isolated and distant from other university campuses. It is possible that mixing with non-vet students or isolation may influence the development of veterinary professional identity, and that this may differ between universities with collegiate systems that promote mixing, and veterinary schools where vet students have more limited encounters with non-vet students.

This study highlighted the need for further exploration of the narrative that the veterinary profession has a high suicide rate, and whether this prevalent narrative in itself is a risk factor for veterinary suicide. There is a risk that awareness of suicide as common in veterinary professionals may be associated with normalisation of suicide as part of veterinary identity, via



increased cognitive availability, or through cultural scripting, thus reducing the threshold at which suicide is contemplated or considered.

Participants discussed distress associated with ethical concerns, moral distress, and with performing euthanasia, which highlights the importance of further research examining the role of moral distress, compassion and human-animal bonding in veterinary mental health. Some authors have hypothesised that the veterinary responsibility to perform animal euthanasia as part of work could normalise death as a solution to intractable difficulty, make suicide a more readily considered option by vets and vet students, and so contribute to the elevated rate of suicide among vets. It was striking in this study that when talking about their own experiences of suicidal thoughts and behaviour or their views of suicide, some participants used language similar to that which vets use around the euthanasia of animals. The hypothesis that performing euthanasia normalises death as a way to end suffering, with consequent implications for vets' attitudes towards suicide as a way to end suffering, warrants further focused research.

Although participants reported fear of detriment for seeking help, the low rates of reported help-seeking and no reported contact with professional regulators did not allow exploration of whether and how vets suffer detriment for disclosing mental health problems.

While this study focused on following vet students through to the early stages of their careers as vets, for a fuller understanding of the development of professional identity it would be important to explore the identities and values of more senior vets and managers, examine how these are propagated to students and junior colleagues, and consider how more positive aspects of professional identity can be enhanced while challenging negative aspects.

The theme of "vet or nothing" taken with the strong emphasis on operating and hands-on clinical skills has strong implications for undergraduate training, postgraduate career development and professional regulation. Qualified vets may choose many career paths which do not require hands-on operating skills, such as public health, research, or clinical education, and

there is emerging interest in consultation-only general veterinary practice. However, these career paths are not fully explained or accorded status during undergraduate training, and the development of professional identity is strongly centred around the ability to perform certain operative procedures unsupervised. If a vet is unable to operate because of a health condition, or if their interests and abilities lie elsewhere, then there is a risk that they will consider that a non-operating career is incompatible with their identity as a vet, with consequent risk for leaving the profession altogether, poor mental health and possibly suicide. Similarly, if professional regulator health proceedings were to emphasise operative skills as a prerequisite for remaining in practice rather than promoting non-operative career pathways as of equal status and supporting registered vets with health conditions into such careers, then such an approach may elevate suicide risk as vets with health conditions view such proceedings as an attack on their core identity.

The view of a vet as necessarily a clinician, who could manage complex clinical situations without help, worked out of hours and at night, with multiple species, presents a difficult challenge for new graduates in contemporary veterinary practice. It is a level of expectation beyond that of the Day One Competencies required by the RCVS to register as a vet in the UK (RCVS, 2014). This concept of what it is to be a vet: a clinician, omnicompetent, multi species, surgically adept, independent and lone practitioner performing 24 hours a day was in some ways surprising. It is at odds with profession-defined priorities for new vets.

Within the veterinary profession there is a confusing and somewhat conflicting focus. Narratives around veterinary medicine talk about protecting public health as well as animal health, and vets' wider roles in one-health concepts around human health. Vets' roles in global food production and food safety are emphasised in projects like the Vet Futures project led by the RCVS and British Veterinary Association looking ahead to veterinary medicine in 2030, and also blueprints for new vet schools and for UK veterinary training. The traditionally small number of UK vet schools has grown in recent years with two newer schools opening in Nottingham and

Surrey. Both of these have emphasised alternative roles to clinical practice for the future of veterinary medicine. Yet, the profession, via the RCVS and the Vet Schools Council, also produces a list of Day One Competencies which vet students must meet to qualify as a vet. These are clinically focussed, as is the RCVS' PDP, which new graduates must complete in the years following graduation if they want to go on to complete further RCVS approved qualifications. This conflicting narrative between wider roles for vets, but training expectations and requirements focussed on clinical procedures was not mirrored in the sense of what it was to be a vet amongst the participants. In the study there was a clear, shared, sense that being a vet required clinical work, and that not performing clinical work threatened that identity.

This clinician-identity was problematic for participants' mental health in a number of ways. The idea of complete independence and omnicompetence sets new graduates a difficult goal to meet. Much veterinary clinical work requires team working, and safety for new graduate practice is focussed around seeking support and involving the rest of the team, yet this idea conflicts with new graduate experiences. It is perhaps their experiences and what they have witnessed, rather than what is taught and discussed about new graduate veterinary life, that influences this aspect of identity. Previous studies with new graduates have found that almost all have been often left unsupervised (Mellanby and Herrtage, 2004), and this study found this too.

## **7.7 Recommendations**

There are a number of implications of the findings of this study, which I have developed into recommendations for universities, vets, employers, the wider profession including professional regulators, and for future research.

### **7.7.1 Key recommendations: summary**

1. Universities, the wider profession and employers should evaluate ways to facilitate gradual transition to clinical responsibility during final year, for example extended induction periods, simulation training,

post-qualification work shadowing or observed practice, and workplace-based formative assessment and feedback.

2. Given the emphasis on professional identity involving not asking for help, regulators and professional bodies should consider how to promote the image of a safe, high performing, “good” vet as one who is confident asking for help.
3. Vets should be mindful of how some beliefs in veterinary culture can have unintended consequences for wellbeing.
4. Employers must be aware of the potential for mismatch between responsibility and experience among new graduate vets, and consider structuring early career pathways to facilitate transition to responsibility over appropriate timescales, particularly for sole charge responsibility, lone working in branch practices or ambulatory practice, and on call.
5. Research is needed to understand whether awareness of high suicide rates among veterinary surgeons and the veterinary discourse around suicide, inevitability of stress and difficulty, and suicide risk as part of the veterinary experience, may contribute to veterinary suicide rates via cultural scripting.

## **7.7.2 Full recommendations:**

### **7.7.2.1 Recommendations for Universities**

The study found a mixed experience of veterinary study, with some aspects of veterinary training and culture potentially enhancing wellbeing and acting for mental health, and others undermining it. From the findings discussed in Chapter 7, I make the following recommendations:

1. This study does not support excluding university applicants with mental health conditions by blanket screening as is sometimes discussed within the veterinary industry. The vets with greater mental health problems in early practice were not those who had had significant mental health problems as students. Given the existing

avoidance of help-seeking to avoid risk of career detriment, screening may paradoxically worsen vet mental health, either by selecting for those less likely to disclose mental health needs or seek help for them, or by training people that disclosure and help-seeking will lead to disadvantage and potentially loss of career.

2. Universities should be aware of the primary motivators of animal care and animal welfare among veterinary students, despite public narratives about science and academic prowess. Universities could evaluate ways to facilitate contact with animals and opportunities for care during early veterinary study, such as shadowing clients or animals during their progress through treatment.
3. Universities should be aware of the protective value of personal relationships with course tutors, whereby students feel known and able to ask for help, and course tutors should be supported to help students, with allocated time and onward referral pathways in place.
4. Alongside the provision of formal support services, universities should consider how to enable and promote access to emotional and instrumental support from sources outside the academy, such as time spent with families (where this is helpful), enabling social networks, and contact with students' own pets or other animals, as these are highly valued and often more likely to be used than university support services.
5. Given that participants valued contact with non-vet students, universities should consider how to balance the promotion of vet-specific events, sports clubs and societies with enabling participation in university-wide events, societies and sports clubs. This may include continuing and checking the protected status of time for sporting activities, transport to central university campuses, and mixed social events.
6. Given the concerns among students about career detriment for seeking help, universities should ensure there are explicit safeguards

to protect against this and that these are understood by students. Fears around fitness to practice or fitness to study inhibited help-seeking so ensuring separation of mental health support and clear communication about fitness to study policies, as well as ensuring private access to student support services may be of benefit.

7. Universities should develop integrated pathways between student support services and local NHS mental health services to avoid people “falling through the cracks” or being diverted between multiple services before receiving help. Universities should be aware of the potential impacts of students being turned away by university counselling services because of pre-existing mental health problems or complexity and be aware that they may not go on to access other help.
8. Students should have adequate experience of non-surgical veterinary careers at undergraduate level, and these should be promoted as of equal status. The high status given to surgical careers placed pressure on students and contributed to a sense of inflexibility in veterinary identity.
9. Universities, the wider profession and employers should evaluate ways to facilitate gradual transition to clinical responsibility during final year, for example extended induction periods, simulation training, post-qualification work shadowing or observed practice, and workplace-based formative assessment and feedback.

#### **7.7.2.2 Recommendations for Vets**

1. Vets should be mindful of how some beliefs in veterinary culture can have unintended consequences for wellbeing.
2. Vets should develop peer support networks which enable reflection and development of positive identity.
3. Vets should aim to cultivate a professional identity that involves being able to ask for help.

4. Vets need to be aware of the pitfalls involved in adopting a professional identity based on role modelling and role rehearsal around current markers of success in veterinary culture, and the potential for conflicts with wellbeing.
5. Vets should ensure that they have interests and friendships outside work and the veterinary profession, which may have protective effects for wellbeing.

#### **7.7.2.3 Recommendations for Employers**

1. Employers of new graduate vets must ensure they meet their responsibilities to provide support, supervision, appropriate induction and early career postgraduate education.
2. In addition to providing adequate support, employers must consider how to address the barriers to accessing that support, in particular perceptions within the profession that accessing support may indicate weakness or failure. It may not be enough to build support and to expect people to come.
3. Employers must be aware of the potential for mismatch between responsibility and experience among new graduate vets, and consider structuring early career pathways to facilitate transition to responsibility over appropriate timescales, particularly for sole charge responsibility, lone working in branch practices or ambulatory practice, and on call.

#### **7.7.2.4 Recommendations for Further Research**

1. Research is needed to understand whether awareness of high suicide rates among veterinary surgeons and the veterinary discourse around suicide, inevitability of stress and difficulty, and suicide risk as part of the veterinary experience, may contribute to veterinary suicide rates via cultural scripting.

2. Research is needed to understand the impact of bereavement by suicide on veterinary students and veterinary professionals and on postvention responses.
3. University support schemes need further evaluation, to include their effectiveness, accessibility and confidentiality.
4. Further research is needed on gender, discrimination and sexual harassment in veterinary study and practice.
5. Research is needed on whether vets with access to alternative narratives about veterinary identity and alternative cultural scripts can develop a less harmful sense of professional identity.
6. The mismatch between a personal love of or care for animals and animal welfare and its absence from veterinary undergraduate and early career discourse is striking and merits specific examination.
7. Research is needed on profession-specific protective factors and interventions to enhance positive aspects of veterinary identity while exploring whether it is possible to reduce the influence of less helpful aspects of veterinary professional identity.
8. The themes of “vet or nothing” and professional identity being centred around clinician-autonomy and not seeking help warrant further qualitative research.
9. The value and feasibility of workplace-based formative approaches to postgraduate education used in other clinical professions should be tested and evaluated in early career vets. These include workplace-based formative assessment, feedback and structured educational supervision.
10. Research is needed on veterinary staff’s access to means of suicide and feasibility and unintended consequences of method-restriction.



#### **7.7.2.5 Recommendations for the wider veterinary profession, Professional Regulators and Professional Associations**

1. Professional regulators should evaluate formal requirements for supporting early career vets with postgraduate education, with reference to approaches to educational supervision, formative assessment and postgraduate curricula in other clinical professions.
2. Professional regulators should also evaluate and consider the duties of more senior vets to provide support, supervision and access to second on call advice for early career vets, and for employers and hospitals to provide support where needed. Lone on call only a very short time after graduation was common and may require specific guidance for employers.
3. Given the emphasis on professional identity involving not asking for help, regulators and professional bodies should consider how to promote the image of a safe, high performing, “good” vet as one who is confident asking for help.
4. Regulators should consider the implications of long working hours on health, patient safety and clinical error, with reference to other professions and to statutory controls on working hours such as the European Working Time Directive.
5. Given the emphasis on “vet or nothing” and professional identity being linked closely to operating, regulators and professional bodies should consider how to promote and elevate the status of veterinary careers which do not involve surgery.
6. Regulators should also review their approach to health-based capability proceedings to ensure that vets who may be unable to operate or work long hours on call are supported to remain registered and practising in alternative career roles.

## 7.8 Summary

This chapter has discussed the transition to veterinary work from veterinary school considering three key areas: perceptions and experiences of mental health, expectations and experiences of work and of support at work, and the development of veterinary professional identity. It has also sought to describe and consider the effects of veterinary professional identity on individuals and has proposed an integrated model.

Although these three areas – mental health, support, and identity - started this study as three distinct aims, through analysis multiple areas of interaction and overlap were identified.

The chapter also reviewed the strengths and limitations of this study, considered questions arising from the work, and made recommendations for universities, for vets, for employers, for the wider profession including professional regulators, and for further research.

## 7.9 In conclusion

This thesis set out to consider the transition from veterinary study to veterinary work, in particular to explore mental health, experiences of work and support, and professional identity.

Experiences of mental health problems, stress, and distress were common, among students, and among vets who were 19-27 months after graduation, but it was not necessarily the same individuals who were experiencing difficulties with their health. In fact those who experienced the greatest difficulties with mental health in practice had not experienced difficulties at university, and those who experienced the greatest difficulties at university had better experiences of transition than some peers without prior mental health problems. This suggests that prior adversity may offer some degree of preparation for transition, and hence protection for individuals who had adapted to that. Professional identity affected mental health, particularly

around support seeking, though also conferred some protective elements, with purpose, meaning, and a community of practice.

The transition to practice was characterised by a deficit of emotional and instrumental support for some participants, particularly clinical support in practice with a striking responsibility-experience mismatch. Moral distress was common and participants often did not have effective support for this. Participants also experienced difficulties due to heavy workload, long hours, no breaks, interpersonal difficulties with colleagues or management, understaffing, gender discrimination, and excessive criticism from more senior colleagues. Some participants had much better experiences of transition, finding and having access to both emotional and instrumental support that met their needs, including job shadowing, the ability to ask questions, a phased start, access to advice when on call, a supportive boss and colleagues, support for CPD, and support from friends and peers.

This study found that veterinary identity may impact veterinary mental health in a number of ways: by inhibiting access to support, by acculturating an expectation of stress and cultural scripts about suicide, and by values and norms that whilst conferring some advantages may also for some individuals act to undermine mental health. It also found that identity may moderate whether and how veterinary students and early career veterinary surgeons view demands and job strain, and may moderate their relationship to seeking support.

The transition to veterinary work is a key time in veterinary careers. Becoming a vet is highly sought after, but the professional identity early career vets form through their professional training and socialisation at transition and before can in some respects act to undermine mental health and wellbeing. Understanding how to support early career vets and present other possible identities for being a good vet may be protective for veterinary mental health.

## Chapter 8 References

2003. Clinical audit: A time to move forward. *Veterinary Record*, 153, 512-514.
2019. Study Results from R.M. Weinborn and Colleagues in the Area of Veterinary Science Reported (Burnout Syndrome Prevalence In Veterinarians Working In Chile). *Psychology & Psychiatry Journal*, 8064.
- AASLAND, O. G. & FALKUM, E. 1992. [How are we today? On physicians' health, well-being and job satisfaction]. *Tidsskrift for Den Norske Laegeforening*, 112, 3818-23.
- ADRIANSEN, H. K. & MADSEN, L. M. 2009. Studying the making of geographical knowledge: The implications of insider interviews. *Norwegian Journal of Geography*, 63, 145-153.
- AGERBO, E., GUNNELL, D., BONDE, J., MORTENSEN, P. & NORDENTOFT, M. 2007. Suicide and occupation: the impact of socio-economic, demographic and psychiatric differences. *Psychological Medicine*, 37, 1131-1140.
- ALBRECHT, G. L., HIGGINS, P. C. 1979. Health Illness and Medicine: A Reader in Medical Sociology. Boston: Houghton Mifflin Company.
- ALLAN, R. 2016. Companion animal medicine: fresh challenges in the evidence-based, client-focused fast lane. *Veterinary Record*, 179, 38.
- ALLISTER, R. 2011. Mental health and wellbeing in veterinary students. University of Edinburgh.
- ALLISTER, R. 2015. Questions of identity. *Veterinary Record*, 176, 431-432.
- ALLISTER, R. 2016. What does it mean to be a vet? *Veterinary Record*, 178, 316-317.
- ALLSOP, J. & MULCAHY, L. 1998. Maintaining professional identity: doctors' responses to complaints. *Sociology of Health & Illness*, 20, 802-824.
- ANDERSEN, K., HAWGOOD, J., KLIEVE, H., KÅMLVES, K. & DE LEO, D. 2010. Suicide in selected occupations in Queensland: evidence from the State suicide register. *Australian & New Zealand Journal of Psychiatry*, 44, 243-249.
- ANDREWS, F. M. 2009. Veterinary school admissions in the United Kingdom: attracting students to veterinary careers to meet the expanding needs of the profession and of global society. *Revue Scientifique et Technique (International Office of Epizootics)*, 28, 699-707.
- ANDRUS, D. M., GWINNER, K. P. & PRINCE, J. B. 2006. Job satisfaction, changes in occupational area, and commitment to a career in food supply veterinary medicine.[see comment]. *Journal of the American Veterinary Medical Association*, 228, 1884-93.
- ANONYMOUS 1991a. Comments on stress and burnout article.[comment]. *Journal of the American Veterinary Medical Association*, 198, 2032-7.
- ANONYMOUS 1991b. Stress and burnout in the profession, part 3: Veterinarians find peace after war against stress and burnout.[see comment]. *Journal of the American Veterinary Medical Association*, 198, 941-2.
- ANTELYES, J. 1988. Coping with stress. *Journal of the American Veterinary Medical Association*, 193, 1222-3.
- ARLUKE, A. 1997. Veterinary education: A plea and plan for sociological study. *Anthrozoos* 10, 3-7.
- ARLUKE, A., SANDERS, C. R. 1996. *Regarding animals*. Philadelphia: Temple University Press.
- ARMITAGE-CHAN, E., MADDISON, J. & MAY, S. A. 2016. What is the veterinary professional identity? Preliminary findings from web-based continuing professional development in veterinary professionalism. *Veterinary Record*, 178, 318.

- ARMITAGE-CHAN, E. & MAY, S. A. 2018a. Developing a professional studies curriculum to support veterinary professional identity formation. *Journal of Veterinary Medical Education*, 45, 489.
- ARMITAGE-CHAN, E. & MAY, S. A. 2018b. Identity, environment and mental wellbeing in the veterinary profession. *Veterinary Record*, 183, 68.
- ARMITAGE-CHAN, E. & MAY, S. A. 2019. The veterinary identity: a time and context model. *Journal of Veterinary Medical Education*, 46, 153.
- ASHFORTH, B. E. & SAKS, A. M. 1995. Work-role transitions: A longitudinal examination of the Nicholson model. *Journal of Occupational and Organizational Psychology*, 68, 157-175.
- AVIS, H. 2002. "Whose voice is that? Making space for subjectivities in interviews. In: AL, L. B. E. (ed.) *Subjectivities, knowledges and feminist geographies; the subjects and ethics of social research*. Oxford: Rowan and Littlefield Publishers Inc.
- BALLARD, E. D., STANLEY, I. H., HOROWITZ, L. M., PAO, M., CANNON, E. A. & BRIDGE, J. A. 2013. Asking youth questions about suicide risk in the pediatric emergency department: results from a qualitative analysis of patient opinions. *Clinical Pediatric Emergency Medicine*, 14, 20.
- BARNETT, R. 2008. Critical professionalism in an age of supercomplexity. In: CUNNINGHAM, B. (ed.) *Exploring Professionalism*. London: Institute of Education, University of London.
- BARTRAM, D., YADEGARFAR, G. & BALDWIN, D. 2009a. A cross-sectional study of mental health and well-being and their associations in the UK veterinary profession. *Social Psychiatry and Psychiatric Epidemiology*, 44, 12, 1075-1085.
- BARTRAM, D. J. & BALDWIN, D. S. 2008. Veterinary surgeons and suicide: influences, opportunities and research directions. *Veterinary Record.*, 162, 36-40.
- BARTRAM, D. J. & BALDWIN, D. S. 2010. Veterinary surgeons and suicide: a structured review of possible influences on increased risk. *Veterinary Record*, 166, 388-97.
- BARTRAM, D. J., SINCLAIR, J. M. & BALDWIN, D. S. 2010. Interventions with potential to improve the mental health and wellbeing of UK veterinary surgeons. *Veterinary Record*, 166, 518-23.
- BARTRAM, D. J., YADEGARFAR, G. & BALDWIN, D. S. 2009b. Psychosocial working conditions and work-related stressors among UK veterinary surgeons. *Occupational Medicine (Lond)*, 59, 334-41.
- BECKER, H. S. 1976. *Boys in white : student culture in medical school*, New Brunswick, N.J. ; London, New Brunswick, N.J. ; London : Transaction.
- BECKETT, D. 2011. Learning to Be - At Work. In: SCANLON, L. (ed.) *"Becoming" a Professional - An Interdisciplinary Analysis of Professional Learning*. London: Springer.
- BEGENY, C., M & BVA 2018. Gender discrimination in the veterinary profession. BVA Employers' Study 2018. London: British Veterinary Association.
- BLADES, C. A., STRITZKE, W. G. K., PAGE, A. C. & BROWN, J. D. 2018. The benefits and risks of asking research participants about suicide: A meta-analysis of the impact of exposure to suicide-related content. *Clinical Psychology Review*, 64, 1-12.
- BLAIR, A. & HAYES, H. M. 1982. Mortality Patterns among US Veterinarians, 1947-1977: An expanded study. *International Journal of Epidemiology*, 11, 391.
- BLAIR, A., HAYES, H. M., JR., BLAIR, A. & HAYES, H. M., JR. 1980. Cancer and other causes of death among US veterinarians, 1966-1977. *International Journal of Cancer*, 25, 181-5.
- BLIGH, J. 2002. The first year of doctoring: still a survival exercise. *Medical Education*, 36, 2-3.

- BLOOR, D. 1976. Knowledge and social imagery. London: Routledge and Kegan Paul.
- BOGG, J., GIBBS, T. & BUNDRED, P. 2001. Training, job demands and mental health of pre-registration house officers. *Medical Education*, 35, 590-595.
- BOURNE, T., WYNANTS, L., PETERS, M., VAN AUDENHOVE, C., TIMMERMAN, D., VAN CALSTER, B. & JALMBRANT, M. 2015. The impact of complaints procedures on the welfare, health and clinical practise of 7926 doctors in the UK: a cross-sectional survey. *BMJ Open*, 5.
- BOXER, P. A. M. D. M. P. H., BURNETT, C. M. S. & SWANSON, N. P. 1995. Suicide and Occupation: A Review of the Literature. *Journal of Occupational & Environmental Medicine*, 37, 442-452.
- BRADBY, M. 1990. Status passage into nursing: another view of the process of socialization into nursing. *Journal of Advanced Nursing*, 15, 1220-1225.
- BRENNAN, N., CORRIGAN, O., ALLARD, J., ARCHER, J., BARNES, R., BLEAKLEY, A., COLLETT, T. & DE BERE, S. R. 2010. The transition from medical student to junior doctor: today's experiences of Tomorrow's Doctors. *Medical Education*, 44, 449-458.
- BURMAN, E. 1997. Minding the gap: Positivism, psychology and the politics of qualitative methods. *Journal of social issues*, 53, 785-801.
- BURY, M. R. 1986. Social constructivism and the development of medical sociology. *Sociology of Health and Illness*, 8, 137-169.
- BUSS, M. K., MARX, E. S. & SULMASY, D. P. 1998. The preparedness of students to discuss end-of-life issues with patients. *Academic medicine*, 73, 418-422.
- BVA/AVS 2008. *British Veterinary Association and Association of Veterinary Students Survey 2008.*, London, British Veterinary Association.
- BVA/RCVS 2014. Vet Futures: Gender statistics about veterinary surgeons in the UK. Vet Futures. London, British Veterinary Association/Royal College of Veterinary Surgeons.
- CAKE, M. A., MCARTHUR, M. M., MATTHEW, S. M. & MANSFIELD, C. 2017. Finding the Balance: Uncovering Resilience in the Veterinary Literature. *Journal of Veterinary Medical Education*, 44, 95-105.
- CAMPBELL, S. M., ULRICH , C. M. & GRADY, C. 2016. A broader understanding of moral distress. *American Journal of Bioethics : AJOB.*, 16, 2.
- CANETTO, S. S. 1993. She Died for Love and He for Glory: Gender Myths of Suicidal Behavior. *Omega Journal of Death and Dying.*, 26, 1-17.
- CANETTO, S. S. 2008. Women and suicidal behavior: A cultural analysis. *American Journal of Orthopsychiatry.*, 78, 259-266.
- CANETTO, S. S. & CLEARY, A. 2012. Men, masculinities and suicidal behaviour. *Social Science & Medicine.*, 74, 461-465.
- CANETTO, S. S. & LESTER, D. 1998. Gender, Culture, and Suicidal Behavior. *Transcultural Psychiatry.*, 35, 163-190.
- CANTRELL, F. L., NORDT, S., MCINTYRE, I. & SCHNEIR, A. 2010. Death on the doorstep of a border community - intentional self-poisoning with veterinary pentobarbital. *Clinical Toxicology (Philadelphia, Pa.)*, 48, 849-850.
- CARDWELL, J. M., LEWIS, E. G., SMITH, K. C., HOLT, E. R., BAILLIE, S., ALLISTER, R. & ADAMS, V. J. 2013. A cross-sectional study of mental health in UK veterinary undergraduates. *Veterinary Record*, 173, 266.
- CARVER, C. S., SCHEIER, M. F. & WEINTRAUB, J. K. 1989. Assessing coping strategies: a theoretically based approach. *Journal of personality and social psychology*, 56, 267.
- CATO, J. E. & CANETTO, S. S. 2003. Attitudes and beliefs about suicidal behavior when coming out is the precipitant of the suicidal behavior. *Sex roles.*, 49, 497-505.

- CAVANAGH, J., CARSON, A., SHARPE, M. & LAWRIE, S. 2003. Psychological autopsy studies of suicide: a systematic review. *Psychological Medicine*, 33, 395-405.
- CAVE, J., WOOLF, K., JONES, A. & DACRE, J. 2009. Easing the transition from student to doctor: How can medical schools help prepare their graduates for starting work? *Medical Teacher*, 31, 403-408.
- CHAPMAN, H. W. 1979. First year DVM students at Guelph. *Anatomy Histology and Embryology*, 8, 182.
- CHARLTON, J. 1995. Trends and patterns in suicide in England and Wales. *International Journal of Epidemiology*, 24, S45-S52.
- CHEN, Y., CHIEN-CHANG, K., YUN WANG, W, YIP, P. S. F. 2016. Suicide prevention through restricting access to means and hotspots, In: , O CONNOR, R. C., PIRKIS, J. (Eds). *The International Handbook of Suicide Prevention, Second Edition*. Oxford: Wiley-Blackwell.
- CHIGERWE, M., BOUDREAUX, K. & ILKIW, J. 2014. Assessment of burnout in veterinary medical students using the Maslach Burnout Inventory-Educational Survey: a survey during two semesters. *BMC Medical Education*, 14.
- CLARK, M. A. & JONES, J. W. 1979. Suicide by intravenous injection of a veterinary euthanasia agent: report of a case and toxicologic studies. *Journal Of Forensic Sciences*, 24, 762-767.
- CLUTTON, R. E. 1985. Attempted suicide with acepromazine maleate: a case report. *Veterinary & Human Toxicology*, 27, 391.
- COHEN, S., UNDERWOOD, L. G. & GOTTLIEB, B., H 2000. *Social Support Measurement and Intervention*, New York, NY, Oxford University Press.
- COHEN, S. P. 2007. Compassion fatigue and the veterinary health team. *Veterinary Clinics of North America - Small Animal Practice*, 37, 123-34; abstract ix.
- COHIDON, C., SANTIN, G., GEOFFROY-PEREZ, B. & IMBERNON, E. 2010. Suicide and occupation in France. *Revue de Epidemiologie et de Sante Publique*, 58, 139-150.
- COLLINS, H. & FOOTE, D. 2005. Managing stress in veterinary students. *Journal of Veterinary Medical Education*, 32, 170-172.
- COLLINS, I. P. & PAYKEL, E. S. 2000. Suicide amongst Cambridge University Students 1970–1996. *Social Psychiatry and Psychiatric Epidemiology*, 35, 128-132.
- COOPER, C. L. & MARSHALL, J. 1976. Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill health. *Journal of Occupational Psychology*, 49, 11-28.
- CORDELL, W. H., CURRY, S. C., FURBEE, R. B. & MITCHELL-FLYNN, D. L. 1986. Veterinary euthanasia drugs as suicide agents. *Annals of Emergency Medicine*, 15, 939-943.
- CORRIGAN, P. 2004. How stigma interferes with mental health care. *American Psychologist*, 59, 614-625.
- CORRIGAN, P. W., MORRIS, S. B., MICHAELS, P. J., RAFACZ, J. D. & RÄCESCH, N. 2012. Challenging the public stigma of mental illness: A meta-analysis of outcome studies (English). *Psychiatric Services (Washington, D.C.)*, 63, 963-973.
- DAVIS, F. 1975. Professional socialisation as subjective experience: The process of doctrinal conversion of student nurse. In: COX, C. & MEAD, A. (Eds.) *A Sociology of Medical Practice*. Oxford: Macmillan.
- DEAN, R., ADAMS, V., MELLANBY, R., ALLISTER, R., PLATT, S., HALLIWELL, R., HARRISON, W., HARDY, B. & SIBBALD, B. 2008. Wellbeing survey of the veterinary profession. *Veterinary Record*, 163, 728.
- DECOU, C. R. & SCHUMANN, M. E. 2018. On the iatrogenic risk of assessing suicidality: A meta-analysis. *Suicide and Life-Threatening Behavior*, 48, 531-543.
- DENHOLM, B. E. 1981. Burnout. *Veterinary Medicine, Small Animal Clinician*, 76, 1491-2.

- DHINGRA, K., KLONSKY, E. D. & TAPOLA, V. 2019. An empirical test of the three-step theory of suicide in U.K. university students. *Suicide and Life-Threatening Behavior*, 49, 478-487.
- DOS SANTOS, D. 2019. Discrimination in the veterinary profession. *Veterinary Record*, 185, 113.
- DOUCET, M. L. Y. & VRINS, A. 2009. The importance of knowledge, skills, and attitude attributes for veterinarians in clinical and non-clinical fields of practice: a survey of licensed veterinarians in Quebec, Canada. *Journal of Veterinary Medical Education*, 36, 331-342.
- DRAKE, S., A., A., HAFEN, M., RUSH, B. R. & REISBIG, A. M. J. 2012. Predictors of anxiety and depression in veterinary medicine students: A Four-Year Cohort Examination. *Journal of Veterinary Medical Education*, 39, 322.
- DYRBYE, L. N., THOMAS, M. R. & SHANAFELT, T. D. 2005. Medical student distress: causes, consequences, and proposed solutions. *Mayo Clinic Proceedings*, 80, 1613-1622.
- EISENBERG, D., GOLLUST, S. E., GOLBERSTEIN, E. & HEFNER, J. L. 2007. Prevalence and correlates of depression, anxiety, and suicidality among university students. *The American Journal of Orthopsychiatry*, 77, 534.
- ELKINS, A. D. 1984. Veterinary student burnout: The results of a burnout questionnaire administered to two-hundredeighty veterinary students at Texas A& M University. *Southwest Vet*, 36, 19-25.
- ELKINS, A. D. & KEARNEY, M. 1992. Professional burnout among female veterinarians in the United States. *Journal of The American Veterinary Medical Association*, 200, 604-608.
- ETZERSDORFER, E., VIJAYAKUMAR, L., SCHÖNY, W., GRAUSGRUBER, A. & SONNECK, G. 1998. Attitudes towards suicide among medical students: comparison between Madras (India) and Vienna (Austria). *Social Psychiatry and Psychiatric Epidemiology*, 33, 104-110.
- FARRELL, S., KAPUR, N., WHILE, D., APPLEBY, L. & WINDFUHR, K. 2017. Suicide in a national student mental health patient population, 1997–2012. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 38, 82-88.
- FISHBAIN, D. A. 1986. Veterinarians with psychiatric impairment--a comparison with impaired physicians. *Journal Of The National Medical Association*, 78, 133-137.
- FITCH, C., HAMILTON, S., BASSETT, P. & DAVEY, R. 2011. The relationship between personal debt and mental health: a systematic review. *Mental Health Review Journal*, 16, 153-166.
- FITZPATRICK, J. M., WHILE, A. E. & ROBERTS, J. D. 1996. Key influences on the professional socialisation and practice of students undertaking different preregistration nurse education programmes in the United Kingdom. *International Journal of Nursing Studies*, 33, 506-518.
- FLECK, L. 1935. *Genesis and Development of a Scientific Fact*. First published Basel: Benno Swarbe, 1935. English translation: BARDLEY F., TRENN T. J. University of Chicago Press, 1979.
- FOG, J., 2004. *Med samtalen som udgangspunkt* [With the conversation as a basis]. Copenhagen: Akademisk Forlag.
- FONTANA, A. & FREY, J. H. 2005. The interview, from neutral stance to political involvement. In: DENZIN, N. K. & LINCOLN, Y. S. (eds.) *The SAGE handbook of qualitative research*. London: Sage.
- FRANKL, V. E. 1969. The will to meaning : foundations and applications of logotherapy. *The will to meaning*. New York: Penguin Books.



- FRANKL, V. E. 2000. Man's search for ultimate meaning. Cambridge, Massachusetts: Perseus Publishing.
- FREIDSON, E. 1986. *Professional Powers - A Study of the Institutionalization of Formal Knowledge*, Chicago: The University of Chicago Press.
- FRITSCHI, L., MORRISON, D., SHIRANGI, A. & DAY, L. 2009. Psychological well-being of Australian veterinarians. *Australian Veterinary Journal*, 87, 76-81.
- GAIDA, S., HÄRTL, A., TIPOLD, A. & DILLY, M. 2018. Communication identity in veterinary medicine: a grounded theory approach. *Veterinary Record Open*, 5.
- GALLAGHER, L. M., KLIEM, C., BEAUTRAIS, A. L. & STALLONES, L. 2008. Suicide and occupation in New Zealand, 2001-2005. *International Journal of Occupational & Environmental Health*, 14, 45-50.
- GARDNER, D. H. & HINI, D. 2006. Work-related stress in the veterinary profession in New Zealand. *New Zealand Veterinary Journal*, 54, 119-24.
- GELBERG, S. & GELBERG, H. 2005. Stress management interventions for veterinary students. *Journal of Veterinary Medical Education*, 32, 173-181.
- GIBB, B. E., ANDOVER, M. S. & BEACH, S. R. 2006. Suicidal ideation and attitudes toward suicide. *Suicide & Life-Threatening Behavior*, 36, 12-8.
- GILLING, M. L. & PARKINSON, T. J. 2009. The transition from veterinary student to practitioner: a "make or break" period. *Journal of Veterinary Medical Education*, 36, 209-215.
- GLOYD, J. S. 1994. Dealing with stress through "the old standby". *Journal of the American Veterinary Medical Association*, 205, 1252-4.
- GMC 2015. Promoting Excellence: standards for medical education and training. General Medical Council.
- GOODFELLOW, P. B. & CLAYDON, P. 2001. Students sitting medical finals - ready to be house officers? *Journal of the Royal Society of Medicine*, 94, 516-520.
- GREGOIRE, A. 2001. Needs assessment for rural mental health services. In: THORNICROFT G, BREWIN CR, WING J, eds. *Measuring Mental Health Needs*, Second edition. London: Gaskell.
- GREGOIRE, A. 2002. The mental health of farmers. *Occupational Medicine*, 52, 471-6.
- GUILLEMIN, M. & GILLAM, L. 2004. Ethics, Reflexivity, and "Ethically Important Moments" in Research. *Qualitative Inquiry*, 10, 261-280.
- GULLIVER, A., GRIFFITHS, K. M. & CHRISTENSEN, H. 2012. Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC Psychiatry*, 12, 157-157.
- GUNNELL, D., MIDDLETON, N., GUNNELL, D. & MIDDLETON, N. 2003. National suicide rates as an indicator of the effect of suicide on premature mortality. *Lancet*, 362, 961-2.
- HAASE, C. M., HECKHAUSEN, J. & SILBEREISEN, R. K. 2012. The interplay of occupational motivation and well-being during the transition from university to work. *Developmental Psychology*, 48, 1739-1751.
- HAFEN, M., JR., REISBIG, A. M., WHITE, M. B. & RUSH, B. R. 2006. Predictors of depression and anxiety in first-year veterinary students: a preliminary report. *Journal of Veterinary Medical Education*, 33, 432-40.
- HAFEN, M., JR., REISBIG, A. M., WHITE, M. B. & RUSH, B. R. 2008. The first-year veterinary student and mental health: the role of common stressors. *Journal of Veterinary Medical Education*, 35, 102-9.
- HALLIWELL, R. E. W., DOWNES, M., ADAMS, V. J., ALLISTER, R., HARRISON, W., MELLANBY, R. J. & DEAN, R. S. 2016. Stress in new graduates: can the profession do more to help? *Veterinary Record*. 178 , 25 , 635-6.

- HAMILTON, T. K. & SCHWEITZER, R. D. 2000. The cost of being perfect: perfectionism and suicide ideation in university students. *Australian and New Zealand Journal of Psychiatry*, 34, 829-835.
- HANNAH, H. W. 1992. Examining veterinarians for physical and mental fitness. *Journal of the American Veterinary Medical Association*, 201, 1002-3.
- HANSEZ, I., SCHINS, F. & ROLLIN, F. 2008. Occupational stress, work-home interference and burnout among Belgian veterinary practitioners. *Irish Veterinary Journal*, 61, 233-241.
- HANTSON, P., SEMAAN, C., JOURET, J. C., RAHIER, J., LAUWERYS, R., BRUNAIN, J. P. & MAHIEU, P. 1996. Intracardiac injection of T-61, a veterinary euthanasia drug. *Journal Of Toxicology. Clinical Toxicology*, 34, 235-239.
- HANTSON, P., VILLA, A., GALLOY, A.-C. C., NEGRI, S., ESABON, G., LAMBIOTTE, F., HAUFROID, V. & GARNIER, R. Dimethylformamide metabolism following self-harm using a veterinary euthanasia product. *Clinical Toxicology*, 48, 725-729.
- HARAWAY, D. J. 1991. *Simians, cyborgs and women: the reinvention of nature*, London: Free Association Books.
- HARLING, M., STREHMEL, P., SCHABLON, A. & NIENHAUS, A. 2009. Psychosocial stress, demoralization and the consumption of tobacco, alcohol and medical drugs by veterinarians. *Journal Of Occupational Medicine And Toxicology*, 4, 4-4.
- HARNOIS, C. E. & BASTOS, J. L. 2018. Discrimination, harassment, and gendered health inequalities: do perceptions of workplace mistreatment contribute to the gender gap in self-reported health? *Journal of health and social behavior*, 59, 283.
- HATCH, P., WINEFIELD, H., CHRISTIE, B. & LIEVAART, J. 2011. Workplace stress, mental health, and burnout of veterinarians in Australia. *Australian Veterinary Journal*, 89, 460-468.
- HAUG, M. 1973. Deprofessionalisation: An alternative hypothesis for the future. In: HALMOS, P. (ed.) *Professionalisation and social change*. Keile: University of Keile.
- HAWTON, K., AGERBO, E., SIMKIN, S., PLATT, B. & MELLANBY, R. J. 2011. Research report: Risk of suicide in medical and related occupational groups: A national study based on Danish case population-based registers. *Journal of Affective Disorders*, 134, 320-326.
- HAWTON, K., BERGEN, H., MAHADEVAN, S., CASEY, D. & SIMKIN, S. 2012. Suicide and deliberate self-harm in Oxford University students over a 30-year period. *The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services*, 47, 43-51.
- HAWTON, K., CLEMENTS, A., SAKAROVITCH, C., SIMKIN, S. & DEEKS, J. J. 2001. Suicide in doctors: a study of risk according to gender, seniority and specialty in medical practitioners in England and Wales, 1979-1995. *Journal of Epidemiology and Community Health*, 55, 296-300.
- HAWTON, K., CLEMENTS, A., SIMKIN, S. & MALMBERG, A. 2000. Doctors who kill themselves: a study of the methods used for suicide. *QJM-an International Journal of Medicine*, 93, 351-357.
- HAWTON, K., FAGG, J., SIMKIN, S., HARRISS, L. & MALMBERG, A. 1998. Methods used for suicide by farmers in England and Wales. The contribution of availability and its relevance to prevention. *The British Journal Of Psychiatry*, 173, 320-324.
- HAWTON, K., HOUSTON, K. & SHEPPERD, R. 1999. Suicide in young people. Study of 174 cases, aged under 25 years, based on coroners' and medical records. *British Journal of Psychiatry*, 175, 271-6.
- HAWTON, K., MALMBERG, A. & SIMKIN, S. 2004. Suicide in doctors A psychological autopsy study (English). *Journal of Psychosomatic Research*, 57, 1-4.

- HAWTON, K., RODHAM, K., EVANS, E. & HARRISS, L. 2009. Adolescents who self harm : a comparison of those who go to hospital and those who do not (English). *Child and Adolescent Mental Health* , 14, 24-30.
- HAWTON, K. & VAN HEERINGEN, K. 2009. Suicide. *Lancet*, 373, 1372-1381.
- HAWTON, K. V. H., K 2000. *The International Handbook of Suicide and Attempted Suicide*, Chichester, West Sussex, Wiley.
- HEALTH AND SAFETY EXECUTIVE: Management standards: causes of stress at work <https://www.hse.gov.uk/stress/causes.htm> Accessed October 2019
- HEATH, T. 1998a. Matching Personal Attributes to those of the Course and the Workplace: examples from veterinary science. *Higher Education Research and Development*, 17, 119-126.
- HEATH, T. J. 1998b. Length of veterinary working life. *Australian Veterinary Journal*, 76, 478-81.
- HEATH, T. J. 2008. Initial work experiences of veterinarians who graduated from Australian universities in 2005. *Australian Veterinary Journal*, 86, 357-364.
- HEATH, T. J. & MILLS, J. N. 2000. Criteria used by employers to select new graduate employees. *Australian Veterinary Journal*, 78, 312-316.
- HECKHAUSEN, J., WROSCHE, C. & SCHULZ, R. 2010. A Motivational Theory of Life-Span Development. *Psychological Review*, 117, 32-60.
- HEM, E., HALDORSEN, T., GJERLÅND, AASLAND, O., TYSEN, R., VAGLUM, P. & EKEBERG, Å. I. 2005. Suicide rates according to education with a particular focus on physicians in Norway 1960-2000 (English). *Psychological Medicine*, 35, 873-880.
- HESKETH, B. & SHOUKSMITH, G. 1986. Job and non-job activities, job satisfaction and mental health among veterinarians. *Journal of Occupational Behavior*, 7, 325-339.
- HINSHAW, A. S., FEETHAM, S. & SHAVER, J. L. F. 1999. *Handbook of clinical nursing research*, Thousand Oaks, Calif. ; London, Thousand Oaks, Calif. ; London : SAGE.
- HOLDEN, M., BUCK, E., CLARK, M., SZAUTER, K. & TRUMBLE, J. 2012. Professional identity formation in medical education: the convergence of multiple domains. *HealthCare Ethics Committee Forum: An Interprofessional Journal on Healthcare Institutions' Ethical and Legal Issues*, 24, 245-255.
- HOLSTEIN, J. A. & GUBRIUM, J. F. 1995. *The active interview / James A. Holstein, Jaber F. Gubrium*, Thousand Oaks, Calif. ; London : Sage, [1995], ©1995.
- HOTH, S. 2008. Professional identity - product of structure, product of choice: Linking changing professional identity and changing professions. *Journal of Organizational Change Management*, 21, 721.
- ILLING, J. C., MORROW, G. M., ROTHWELL NEE KERGON, C. R., BURFORD, B. C., BALDAUF, B. K., DAVIES, C. L., PEILE, E. B., SPENCER, J. A., JOHNSON, N., ALLEN, M. & MORRISON, J. 2013. Perceptions of UK medical graduates' preparedness for practice: a multi-centre qualitative study reflecting the importance of learning on the job. *BMC Medical Education*, 13, 34-34.
- JAMETON, A. 1984. *Nursing practice: The ethical issues*. Englewood Cliffs, NJ: Prentice-Hall.
- JEYARETNAM, J., JONES, H., PHILLIPS, M., JEYARETNAM, J., JONES, H. & PHILLIPS, M. 2000. Disease and injury among veterinarians. *Australian Veterinary Journal*, 78, 625-9.
- JOHNSON, S., COOPER, C., CARTWRIGHT, S., DONALD, I., TAYLOR, P. & MILLET, C. 2005. The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20, 178-187.
- JONES-FAIRNIE, H., FERRONI, P., SILBURN, S. & LAWRENCE, D. 2008. Suicide in Australian veterinarians. *Australian Veterinary Journal*, 86, 114-116.
- KARASEK, R. & THEORELL, T. 1990. *Healthy work: stress, productivity, and the reconstruction of working life*, New York, Basic Books.

- KARASEK, R. A. 1979. Job demands, job decision latitude and mental strain: implications for job design. *Administrative Science Quarterly*, 24, 285-308.
- KARASEK, R. THEORELL, R. (1990) Healthy work: stress, productivity and the reconstruction of working life. New York: Basic books.
- KASSEM, A. M., WITTE, T. K., NETT, R. J. & CARTER, K. K. 2019. Characteristics associated with negative attitudes toward mental illness among US veterinarians. *Journal of the American Veterinary Medical Association*, 254, 979-985.
- KELLY, S. & BUNTING, J. 1998. Trends in suicide in England and Wales, 1982-96. *Population Trends*, 92, 29-41.
- KELMAN, E. G. 1978. Stressors for veterinary medical students and types of students reporting most stress. *Journal of Veterinary Medical Education*, 5, 145-151.
- KERSEBOHM, J. C., LORENZ, T., BECHER, A. & DOHERR, M. G. 2017. Factors related to work and life satisfaction of veterinary practitioners in Germany. *Veterinary Record Open*, 4.
- KING, S. H. 1962. Perceptions of illness and medical practice. New York: Russel Sage Foundation.
- KINLEN, L. J. 1983. Mortality among British veterinary surgeons. *British Medical Journal (Clinical Research Ed.)*, 287, 1017-1019.
- KINNISON, T. & MAY, S. A. 2013. Veterinary career ambitions correlate with gender and past experience, with current experience influencing curricular perspectives. *Veterinary Record*, 172, 1-6.
- KINSELLA, M. 2006. Suicide in the veterinary profession: The hidden reality. *Irish Veterinary Journal*, 59, 640-642.
- KINTZ, P., CIRIMELE, V. & LUDS, B. 2002. Blood investigation in a fatality involving the veterinary drug T-61. *Journal Of Analytical Toxicology*, 26, 529-531.
- KLOSTERMAN, E. S., KASS, P. H. & WALSH, D. A. 2009. Approaches to veterinary education--tracking versus a final year broad clinical experience. Part one: effects on career outcome. *Revue Scientifique Et Technique (International Office Of Epizootics)*, 28, 797-810.
- KNIGHTS, D. & CLARKE, C. 2019. Gendered practices in veterinary organisations. *Veterinary Record*, 185.
- KOGAN, L. R. & MCCONNELL, S. L. 2001. Veterinary students and psychologic services. *Journal of the American Veterinary Medical Association*, 218, 873-5.
- KOGAN, L. R., MCCONNELL, S. L. & SCHOENFELD-TACHER, R. 2005. Veterinary students and non-academic stressors. *Journal of Veterinary Medical Education*, 32, 193-200.
- KOGAN, L. R., SCHOENFELD-TACHER, R. & HATHCOCK, J. 2012. Psychological services for US and international veterinary students. *Journal of Veterinary Medical Education*, 39, 83-92.
- KUHN, T. S. 1962. The structure of scientific revolutions. Chicago: Chicago University Press.
- KVALE, S. 2006. Dominance through interviews and dialogues. *Domination Å travers interviews et dialogues*, 12, 480-500.
- LAIDLAW, A., GUILD, S. & STRUTHERS, J. 2009. Graduate attributes in the disciplines of Medicine, Dentistry and Veterinary Medicine: a survey of expert opinions. *BMC Medical Education*, 9.
- LANE, I. F. & BOGUE, E. G. 2010. Perceptions of veterinary faculty members regarding their responsibility and preparation to teach non-technical competencies. *Journal of Veterinary Medical Education*, 37, 238-247.
- LARSON, J. E. & CORRIGAN, P. W. 2010. Psychotherapy for self-stigma among rural clients. *Journal Of Clinical Psychology*, 66, 524-536.

- LEE, J., CHO, D. & SUH, Y. J. 2017. Purpose and meaning in life and job satisfaction among the aged. *The International Journal of Aging and Human Development*, 85, 377-402.
- LEMPPE, H., COCHRANE, M., SEABROOK, M. & REES, J. 2004. Impact of educational preparation on medical students in transition from final year to PRHO year: a qualitative evaluation of final-year training following the introduction of a new year 5 curriculum in a London medical school. *Medical Teacher*, 26, 276.
- LENARDUZZI, R., SHEPPARD, G. A. & SLATER, M. R. 2009. factors influencing the choice of a career in food-animal practice among recent graduates and current students of texas a&m university, College of Veterinary Medicine. *Journal of Veterinary Medical Education*, 36, 7-15.
- LEWIS, E. G. & CARDWELL, J. M. 2019. A comparative study of mental health and wellbeing among UK students on professional degree programmes. *Journal of Further and Higher Education*, 43, 1226-1238.
- LORD, L. K., BRANDT, J. C. & NEWHART, D. W. 2013. Identifying the needs of veterinary students and recent alumni in establishing a student service center. *Journal of Veterinary Medical Education*, 40, 192-198.
- LORETTO, W., POPHAM, F., PLATT, S., PAVIS, S., HARDY, G., MACLEOD, L. & GIBBS, J. 2005. Assessing psychological well-being: A holistic investigation of NHS employees. *International Review of Psychiatry*, October, 329-336.
- LÖWY, I. 1988. Ludwik Fleck on the social construction of medical knowledge. *Sociology of Health and Illness*, 10, 2, 133-155.
- LUCAS, E. 1984. Meaningful living: Logotherapeutic guide to health. New York: Grove.
- LUTHY, C., PERRIER, A., PERRIN, E., CEDRASCHI, C. & ALLAZ, A. F. 2004. Exploring the major difficulties perceived by residents in training: a pilot study. *Swiss Medical Weekly*, 134, 612-617.
- MALMBERG, A., HAWTON, K. & SIMKIN, S. 1997. A study of suicide in farmers in England and Wales. *Journal of Psychosomatic Research*, 43, 107-111.
- MARTIN, F., RUBY, K. & FARNUM, J. 2003. Importance of the human-animal bond for pre-veterinary, first-year, and fourth-year veterinary students in relation to their career choice. *Journal of Veterinary Medical Education*, 30, 67-72.
- MASON, J. 2002. Qualitative Interviewing. In: MASON, J. (ed.) *Qualitative researching*.
- MASTENBROEK, N. J. J. M., DEMEROUTI, E., VAN BEUKELLEN, P., MUIJTJENS, A. M. M., SCHERPBIER, A. J. J. A. & JAARSMA, A. D. C. 2014a. Measuring potential predictors of burnout and engagement among young veterinary professionals; construction of a customised questionnaire (the Vet-DRQ). *Veterinary Record*, 174, 168.
- MASTENBROEK, N. J. J. M., JAARSMA, A. D. C., DEMEROUTI, E., MUIJTJENS, A. M. M., SCHERPBIER, A. J. J. A. & VAN BEUKELLEN, P. 2014b. Burnout and engagement, and its predictors in young veterinary professionals: the influence of gender. *Veterinary Record*, 174, 144.
- MAUDSLEY, F. R. 2001. Role models and the learning environment: essential elements in effective medical education. *Academic Medicine*, 76, 432-434.
- MAUTNER, M., BIRCH, M., JESSOP, J., MILLER, T. (Eds). 2002. *Ethics in qualitative research*. London: Sage.
- MAVOR, K. I., MCNEILL, K. G., ANDERSON, K., KERR, A., O'REILLY, E. & PLATOW, M. J. 2014. Beyond prevalence to process: the role of self and identity in medical student well-being. *Medical Education*, 48, 351-360.
- MCDOWELL, L. 1992. Doing gender: feminism, feminists and research methods in human geography. *Transactions of the Institute of British Geographers*, 399.
- MCLENNAN, M. W. & SUTTON, R. H. 2005. Stress in veterinary science students: a study at the University of Queensland. *J Vet Med Educ*, 32, 213-218.

- MCMANUS, I. C., KEELING, A. & PAICE, E. 2004. Stress, burnout and doctors' attitudes to work are determined by personality and learning style: A twelve year longitudinal study of UK medical graduates. *BMC Medicine*, 2, 29-12.
- MEHTA, N., KASSAM, A., LEESE, M., BUTLER, G. & THORNICROFT, G. 2009. Public attitudes towards people with mental illness in England and Scotland, 1994-2003. *The British journal of psychiatry : the journal of mental science*, 194, 278.
- MELLANBY, R. J. 2005. Incidence of suicide in the veterinary profession in England and Wales.[see comment]. *Veterinary Record*, 157, 415-7.
- MELLANBY, R. J. & HERRTAGE, M. E. 2004. Survey of mistakes made by recent veterinary graduates. *Veterinary Record*, 155, 761-5.
- MELLANBY, R. J., HUDSON, N. P., ALLISTER, R., BELL, C. E., ELSE, R. W., GUNN-MOORE, D. A., BYRNE, C., STRAITON, S. & RHIND, S. M. 2011. Evaluation of suicide awareness programmes delivered to veterinary undergraduates and academic staff. *Veterinary Record*, 167, 730-4.
- MELTZER, H., BEBBINGTON, P., BRUGHA, T., JENKINS, R., MCMANUS, S. & DENNIS, M. S. 2011. Personal debt and suicidal ideation. *Psychological Medicine*, 41, 771-778.
- MELTZER, H., DENNIS, M., BAILLON, S., BRUGHA, T., LINDESAY, J. & STEWART, R. 2007. The spectrum of suicidal ideation in Great Britain: comparisons across a 16-74 years age range. *Psychological Medicine*, 37, 795-805.
- MELTZER, H., GRIFFITHS, C., BROCK, A., ROONEY, C. & JENKINS, R. 2008. Patterns of suicide by occupation in England and Wales: 2001-2005 (English). *British Journal of Psychiatry*, 193, 73-76.
- MERTON, R. K., READER, G. G., KENDALL, P. L. & COLUMBIA UNIVERSITY. BUREAU OF APPLIED SOCIAL, R. 1957. *The student-physician : introductory studies in the sociology of medical education*, Cambridge, Mass: Published for the Commonwealth Fund by Harvard University Press.
- MIKLIN, S., MUELLER, A. S., ABRUTYN, S. & ORDONEZ, K. 2019. What does it mean to be exposed to suicide?: Suicide exposure, suicide risk, and the importance of meaning-making. *Social Science & Medicine*, 233, 21-27.
- MILES, , M. B., HUBERMAN, A. M., SALDANA, J. 2014. Qualitative data analysis: a methods sourcebook. Edition 3. Thousand Oaks: Sage.
- MILLIGAN, C., MARGARYAN, A. & LITTLEJOHN, A. 2013. Learning at transition for new and experienced staff. *Journal of Workplace Learning*, 25, 217-230.
- MONROUXE, L. V. 2010. Identity, identification and medical education: why should we care? *Medical Education*, 44, 40-49.
- MONROUXE, L. V. & REES, C. E. 2012. "It's just a clash of cultures": emotional talk within medical students' narratives of professionalism dilemmas. *Advances in Health Sciences Education : Theory and Practice*, 17, 671.
- MOORE, I. C., COE, J. B., ADAMS, C. L., CONLON, P. D. & SARGEANT, J. M. 2014. The role of veterinary team effectiveness in job satisfaction and burnout in companion animal veterinary clinics. *JAVMA: Journal of the American Veterinary Medical Association*, 245, 513-524.
- MORROW, G., JOHNSON, N., BURFORD, B., ROTHWELL, C., SPENCER, J., PEILE, E., DAVIES, C., ALLEN, M., BALDAUF, B., MORRISON, J. & ILLING, J. 2012. Preparedness for practice: the perceptions of medical graduates and clinical teams. *Medical Teacher*, 34, 123-135.
- MOSER, S. 2008. Personality: a new positionality? *Area*, 40, 383-392.
- MUSSHOFF, F., KIRSCHBAUM, K. M. & MADEA, B. Another suicide using the veterinary drug T61 and distribution of drugs in the body. *Journal Of Analytical Toxicology*, 37, 186-186.

- NAHAPIET, J. & GHOSHAL, S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management. The Academy of Management Review*, 23, 242-266.
- NAHAR, V. K., DAVIS, R. E., DUNN, C., LAYMAN, B., JOHNSON, E. C., DASCANIO, J. J., JOHNSON, J. W. & SHARMA, M. 2019. The prevalence and demographic correlates of stress, anxiety, and depression among veterinary students in the Southeastern United States. *Research in Veterinary Science*, 125, 370-373.
- NETT, R. J., WITTE, T. K., HOLZBAUER, S. M., ELCHOS, B. L., CAMPAGNOLO, E. R., MUSGRAVE, K. J., CARTER, K. K., KURKJIAN, K. M., VANICEK, C., O'LEARY, D. R., PRIDE, K. R. & FUNK, R. H. 2015a. Notes from the field: prevalence of risk factors for suicide among veterinarians—United States 2014. *Centers for Disease Control and Prevention, Morb Mortal Wkly Rep*.
- NETT, R. J., WITTE, T. K., HOLZBAUER, S. M., ELCHOS, B. L., CAMPAGNOLO, E. R., MUSGRAVE, K. J., CARTER, K. K., KURKJIAN, K. M., VANICEK, C. F., LEARY, D. R., PRIDE, K. R. & FUNK, R. H. 2015b. Risk factors for suicide, attitudes toward mental illness, and practice-related stressors among US veterinarians. *Journal of the American Veterinary Medical Association*, 247, 945.
- NG, W.-H., MENZIES, J. & ZUTSHI, A. 2019. Facilitators and inhibitors of international postgraduate students' university-to-work transition. *Australian Journal of Career Development*, 28, 186-196.
- NICHOLSON, M., and MCLAUGHLIN, C. 1987. Social constructionism and medical sociology: a reply to R. M. Bury, *Sociology of Health and Illness*, 9, 2, 107-126
- NICHOLSON, N. 1984. A Theory of Work Role Transitions. *Administrative Science Quarterly*, 29, 172-172.
- NVIVO 2014. NVivo qualitative data analysis software; QSR International Pty Ltd. Version 10, 2014.
- O'CONNOR, R. C. 2011. The integrated motivational-volitional model of suicidal behavior. *Crisis*, 32, 295.
- O'CONNOR, R. C., CLEARE, S. , ESCHLE, S. , WETHERALL, K. AND KIRTLEY, O. J. 2016. The *Integrated Motivational-Volitional model of suicidal behavior*. In: PIRKIS, R. C. O. C. A. J. (ed.) *In The International Handbook of Suicide Prevention*.
- OECD 2003. Organisation for Economic Co-operation and Development. Glossary of statistical terms: Foreign students.
- ONS 2013. Stress and psychological disorders. London: Health and Safety Executive.
- ONS 2018. Estimating suicide among higher education students, England and Wales: Experimental Statistics.
- O'CONNOR, R. C. & PORTZKY, G. 2018. The relationship between entrapment and suicidal behavior through the lens of the integrated motivational–volitional model of suicidal behavior. *Current Opinion in Psychology*, 22, 12-17.
- PERRIN, A. J. 2015. Intentional misuse of veterinary medications in human suicide. *Journal of Veterinary Pharmacology & Therapeutics*, 38, 209-213.
- PERRIN, H. 2016. Rhetoric and reality: the development of professional identity in uk veterinary medicine. ProQuest Dissertations Publishing.
- PETERSEN, M. R. & BURNETT, C. A. 2008. The suicide mortality of working physicians and dentists (English). *Occupational medicine*, 58, 25-29.
- PICKLES, K. J., RHIND, S. M., MILLER, R., JACKSON, S., ALLISTER, R., PHILP, J., WATERHOUSE, L. & MELLANBY, R. J. 2011. Potential barriers to veterinary student access to counselling and other support systems: perceptions of staff and students at a UK veterinary school. *Veterinary Record*, 170, 124.

- PITKALA, K. H. & MANTYRANTA, T. 2003. Professional socialization revised: medical students' own conceptions related to adoption of the future physician's role--a qualitative study. *Medical Teacher*, 25, 155-160.
- PITMAN, A. 2018. Addressing suicide risk in partners and relatives bereaved by suicide. *The British Journal of Psychiatry*, 212, 197.
- PITMAN, A., OSBORN, D. & KING, M. 2014a. Suicide bereavement and risk for suicide attempt: a national cross-sectional survey of young adults. *The Lancet*, 383, S82.
- PITMAN, A., OSBORN, D., KING, M. & ERLANGSEN, A. 2014b. Effects of suicide bereavement on mental health and suicide risk. *The Lancet Psychiatry*, 1, 86-94.
- PITMAN, A. L., OSBORN, D. P. J., RANTELL, K. & KING, M. B. 2016. Bereavement by suicide as a risk factor for suicide attempt: a cross-sectional national UK-wide study of 3432 young bereaved adults. *BMJ Open*, 6.
- PLATT, B., HAWTON, K., SIMKIN, S., DEAN, R. & MELLANBY, R. J. 2012a. Suicidality in the veterinary profession: Interview study of veterinarians with a history of suicidal ideation or behaviour. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 33, 280-289.
- PLATT, B., HAWTON, K., SIMKIN, S. & MELLANBY, R. J. 2010. Systematic review of the prevalence of suicide in veterinary surgeons (English). *Occupational medicine*, 60, 436-446.
- PLATT, B., HAWTON, K., SIMKIN, S. & MELLANBY, R. J. 2012b. Suicidal behaviour and psychosocial problems in veterinary surgeons: a systematic review. *Social psychiatry and psychiatric epidemiology*, 47, 223-240.
- PLATT, S. & HAWTON, K. 2000. Suicidal behaviour and the labour market. In: HAWTON, K., VAN HEERINGEN, K (ed.) *International Handbook of Suicide and Attempted Suicide*. Chichester: John Wiley & Sons, Ltd.
- PLATT, S. D. 1987. Suicide and parasuicide among further education students in Edinburgh. *The British Journal of Psychiatry*, 150, 183.
- POWERS, D. E. 2002. Student perceptions of the first year of veterinary medical school. *Journal of Veterinary Medical Education*, 29, 227-230.
- PRINCE, K., VAN DE WIEL, M., VAN DER VLEUTEN, C., BOSHUIZEN, H. & SCHERPBIER, A. 2004. Junior doctors' opinions about the transition from medical school to clinical practice: a change of environment. *Education for Health: Change in Learning & Practice*, Taylor & Francis Ltd, 17, 323-331.
- RAPLEY, T. 2004. Interviews. In: SEALE, C., GIAMPIETRO, G., GUBRIUM, J. F. & SILVERMAN, D. (eds.) *Qualitative research practice*. London: Sage.
- RCVS. 2010. *Royal College of Veterinary Surgeons. EMS recommendations, policy and guidance*. [Online]. London. Available: <https://www.rcvs.org.uk/document-library/ems-recommendations-policy-and-guidance/> [Accessed 2019].
- RCVS 2013a. Code of professional conduct for veterinary surgeons. London: Royal College of Veterinary Surgeons.
- RCVS 2013b. RCVS Facts. London: Royal College of Veterinary Surgeons.
- RCVS. 2014. *Day One Competencies* [Online]. Available: <https://www.rcvs.org.uk/document-library/day-one-competencies/> [Accessed October 2019]. London: Royal College of Veterinary Surgeons.
- RCVS 2019. The Postgraduate Development Phase. London: Royal College of Veterinary Surgeons.
- READ, E. A. & LASCHINGER, H. K. S. 2015. The influence of authentic leadership and empowerment on nurses' relational social capital, mental health and job satisfaction over the first year of practice. *Journal of Advanced Nursing*. 71, 1611-23.



- REIJULA, K., RASANEN, K., HAMALAINEN, M., JUNTUNEN, K., LINDBOHR, M. L., TASKINEN, H., BERGBOM, B. & RINTA-JOUPPI, M. 2003. Work environment and occupational health of Finnish veterinarians. *American Journal of Industrial Medicine*, 44, 46-57.
- REISBIG, A. M. J., DANIELSON, J. A., WU, T.-F., HAFEN, M., KRIENERT, A., GIRARD, D. & GARLOCK, J. 2012. A study of depression and anxiety, general health, and academic performance in three cohorts of veterinary medical students across the first three semesters of veterinary school. *Journal of Veterinary Medical Education*, 39, 341.
- REMAIN, N., GIROUD, C., MICHAUD, K. & MANGIN, P. 2003. Suicide by injection of a veterinarian barbiturate euthanasia agent: report of a case and toxicological analysis (English). *Forensic Science International*, 131, 103-107.
- REPORT, V. R. N. 2017. Equine corporate practice: is it inevitable and will it benefit vets and their clients? : BMJ Publishing Group Limited.
- RHIND, S., BAILLIE, S., KINNISON, T., SHAW, D., BELL, C., MELLANBY, R., HAMMOND, J., HUDSON, N., WHITTINGTON, R. & DONNELLY, R. 2011a. The transition into veterinary practice: Opinions of recent graduates and final year students. *BMC Medical Education*, 11, 64.
- RHIND, S. M., BAILLIE, S., KINNISON, T., SHAW, D. J., BELL, C. E., MELLANBY, R. J., HAMMOND, J., HUDSON, N. P. H., WHITTINGTON, R. E. & DONNELLY, R. 2011b. The transition into veterinary practice: opinions of recent graduates and final year students. *BMC Medical Education*, 11, 64-64.
- RITSHER, J. B. & PHELAN, J. C. 2004. Internalized stigma predicts erosion of morale among psychiatric outpatients. *Psychiatry Research*, 129, 257-265.
- ROBERTS, C. 2018. Corporate giants – friend or foe of the recent graduate? : Veterinary Record. 183, 545.
- ROBERTS, S. E., JAREMIN, B. & LLOYD, K. 2013. High-risk occupations for suicide (English). *Psychological medicine (Print)*, 43, 1231-1240.
- ROBINSON, D. & HOOKER, H. 2006. The UK veterinary profession in 2006: the findings of a survey of the profession conducted by the Royal College of Veterinary Surgeons. .
- ROSE, G. 1997. Situating knowledges: positionality, reflexivities and other tactics. *Progress in Human Geography*, 21, 305-320.
- SALTMARSH, S., SUTHERLAND-SMITH, W. & RANDELL-MOON, H. 2011. Best foot forward, watching your step, jumping in with both feet, or sticking your foot in it? the politics of researching academic viewpoints. *Qualitative Research Journal (RMIT Training Pty Ltd trading as RMIT Publishing)*, 11, 48-62.
- SANS, P., MOUNIER, L., BÄCKSTRÖM, J.-J. & LIJOUR, B. A. 2011. The motivations and practice-area interests of first-year French veterinary students (2005-2008). *Journal Of Veterinary Medical Education*, 38, 199-207.
- SATO, R., KAWANISHI, C., YAMADA, T., HASEGAWA, H., IKEDA, H., KATO, D., FURUNO, T., KISHIDA, I., HIRAYASU, Y., SATO, R., KAWANISHI, C., YAMADA, T., HASEGAWA, H., IKEDA, H., KATO, D., FURUNO, T., KISHIDA, I. & HIRAYASU, Y. 2006. Knowledge and attitude towards suicide among medical students in Japan: preliminary study. *Psychiatry & Clinical Neurosciences*, 60, 558-62.
- SAVICKAS, M. L., NOTA, L., ROSSIER, J., DAUWALDER, J.-P., DUARTE, M. E., GUICHARD, J., SORESI, S., VAN ESBROECK, R. & VAN VIANEN, A. E. M. 2009. Life designing: a paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75, 239.
- SAWYER, D. & SOBAL, J. 1987. Public attitudes toward suicide demographic and ideological correlates. *The Public Opinion Quarterly*, 51, 92-101.

- SCANLON, L. 2011. 'Becoming' a Professional. In: SCANLON, L. (ed.) *"Becoming" a professional - an interdisciplinary analysis of professional learning*. London: Springer.
- SCHULL, D., MORTON, J., COLEMAN, G. & MILLS, P. 2012. Final-year student and employer views of essential personal, interpersonal and professional attributes for new veterinary science graduates. *Australian Veterinary Journal*, 90, 100-104.
- SCHWARTZ, A. 2011. Rate, relative risk, and method of suicide by students at 4-year colleges and universities in The United States, 2004-2005 through 2008-2009. *Suicide & Life - Threatening Behavior*, 41, 353.
- SCOTT, S. 1985. Feminist research and qualitative methods. In P. BURGESS (Ed) *Issues in educational research* (pp67-85) Philadelphia: Farmer Press
- SHACKLADY, J., HOLMES, E., MASON, G., DAVIES, I. & DORNAN, T. 2009. Maturity and medical students' ease of transition into the clinical environment. *Medical Teacher*, 31, 621-626.
- SIEGRIST, J. 1996. Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1, 27-41.
- SILVERMAN, D. 1993. *Interpreting qualitative data: methods for analysing talk, text and interaction*, London, Sage.
- SILVERMAN, D. 2011. *Interpreting qualitative data*. London: Sage Publications.
- SILVERMAN, M. M., MEYER, P. M., SLOANE, F., RAFFEL, M. & PRATT, D. M. 1997. The big ten student suicide study: a 10-year study of suicides on midwestern university campuses. *Suicide and Life-Threatening Behavior*, 27, 285-303.
- SKEGG, K., FIRTH, H., GRAY, A. & COX, B. 2010. Suicide by occupation: does access to means increase the risk? (English). *Australian and New Zealand Journal of Psychiatry*, 44, 429-434.
- SKIPPER, G. E. & WILLIAMS, J. B. 2011. Failure to acknowledge high suicide risk among veterinarians. *Journal Of Veterinary Medical Education*, 39, 79-82.
- SPVS 2018. SPVS Salary Survey 2017. Society of Practising Veterinary Surgeons.
- ST. LOUIS, K. & BARTON, A. C. 2002. Tales from the science education crypt: a critical reflection of positionality, subjectivity, and reflexivity in research. *Forum: Qualitative Social Research*, 3, 249-262.
- STACK, S. 2000. Work and the Economy. In: MARIS, R. W., BERMAN, A. L. & SILVERMAN, M. M. (eds.) *Comprehensive textbook of suicidology*. New York: The Guildford Press.
- STACK, S. 2001. Occupation and Suicide. *Social Science Quarterly (Blackwell Publishing Limited)*, 82, 384.
- STARK, C., BELBIN, A., HOPKINS, P., GIBBS, D., HAY, A. & GUNNELL, D. 2006. Male suicide and occupation in Scotland. *Health Statistics Quarterly / Office For National Statistics*, 26-29.
- STATHAM, J. M. E. 2019. What is the future of cattle veterinary practice? *Veterinary Record*, 185, 202.
- STICE, B. D. & SARA CANETTO, S. 2008. Older adult suicide: perceptions of precipitants and protective factors. *Clinical Gerontologist*, 31, 4-30.
- STOCKNER, P. K. 1981. Burnout: yes it also happens to veterinarians. *Modern Veterinary Practice*, 62, 751-5.
- STOWELL, L. I. 1998. Suicide with the veterinary drug acepromazine. *Journal Of Analytical Toxicology*, 22, 166-168.
- STRAND, E. B., ZAPARANICK, T. L. & BRACE, J. J. 2005. Quality of life and stress factors for veterinary medical students. *Journal of Veterinary Medical Education*, 32, 182-192.
- TEUNISSEN, P. W. & WESTERMAN, M. 2011. Junior doctors caught in the clash: the transition from learning to working explored. *Medical Education*, 45, 968-970.

- TOMASI, S. E., FECHTER-LEGGETT, E. D., EDWARDS, N. T., REDDISH, A. D., CROSBY, A. E. & NETT, R. J. 2019. Suicide among veterinarians in the United States from 1979 through 2015. *Journal of the American Veterinary Medical Association*, 254, 104.
- TOMLIN, J. L., BRODBELT, D. C. & MAY, S. A. 2009. Veterinary students' understanding of a career in practice. *Veterinary Record*, 166, 781-786.
- TOMLIN, J. L., BRODBELT, D. C. & MAY, S. A. 2010. Influences on the decision to study veterinary medicine: variation with sex and background. *Veterinary Record*, 166, 744-748.
- ULRICH, C. M. & GRADY, C. 2018. *Moral distress in the health professions*, Cham: Springer International Publishing.
- VAN HELL, E. A., KUKS, J. B. M., SCHÄFFER, J., VAN LOHUIZEN, M. T. & COHEN-SCHOTANUS, J. 2008. Transition to clinical training: influence of pre-clinical knowledge and skills, and consequences for clinical performance. *Medical Education*, 42, 830-837.
- VANHAAFTEN, E. H., OLFF, M. & KERSTEN, P. H. 2004. The psychological impact of the Foot and Mouth Disease crisis on Dutch dairy farmers. *NJAS - Wageningen Journal of Life Sciences*, 51, 339-349.
- VILHJALMSSON, R., SVEINBJARNARDOTTIR, E. & KRISTJANSDDOTTIR, G. 1998. Factors associated with suicide ideation in adults. *Social Psychiatry and Psychiatric Epidemiology*, 33, 97-103.
- VOGEL, D. L., BITMAN, R. L., HAMMER, J. H. & WADE, N. G. 2013. Is stigma internalized? the longitudinal impact of public stigma on self- stigma. *Journal of Counseling Psychology*, 60, 311-316.
- VOGEL, D. L., WADE, N. G. & HACKLER, A. H. 2007. Perceived public stigma and the willingness to seek counseling : The mediating roles of self-stigma and attitudes toward counseling (English). *Journal of Counseling Psychology*, 54, 40-50.
- WALSH, D. A., KLOSTERMAN, E. S. & KASS, P. H. 2009. Approaches to veterinary education--tracking versus a final year broad clinical experience. Part two: instilled values. *Revue Scientifique Et Technique (International Office Of Epizootics)*, 28, 811-822.
- WATERS, A. 2018. Gender pay gap exists across the profession. *Veterianry Record*, 182, 92.
- WEAVER, R., PETERS, K., KOCH, J. & WILSON, I. 2011. ' Part of the team': professional identity and social exclusivity in medical students. *Medical Education*, 45, 1220-1229.
- WENGER, E. 2000. Communities of practice and social learning systems. *Organization*, 7, 225-246.
- WHO 2002. World report on violence and health. Geneva: World Health Organisation.
- WHO 2019. Suicide in the World: Global Health Estimates.
- WILKINSON, T. J. & HARRIS, P. 2002. The transition out of medical school - a qualitative study of descriptions of borderline trainee interns. *Medical Education*, 36, 466-471.
- WILLIAMS, K. 1997. Preventing suicide in young people: what is known and what is needed. *Child: Care, Health & Development*, 23, 173-85.
- WILLIAMS, S. M., ARNOLD, P. K., MILLS, J. N., WILLIAMS, S. M., ARNOLD, P. K. & MILLS, J. N. 2005. Coping with stress: a survey of Murdoch University veterinary students. *Journal of Veterinary Medical Education*, 32, 201-12.
- WINTERROWD, E., CANETTO, S. S. & BENOIT, K. 2017. Permissive beliefs and attitudes about older adult suicide: a suicide enabling script? *Aging & Mental Health*, 21, 173-181.
- WITTE, T. K., CORREIA, C. J. & ANGARANO, D. 2013. Experience with euthanasia is associated with fearlessness about death in veterinary students. *Suicide & Life-Threatening Behavior*, 43, 125-138.

- WITTE, T. K., SPITZER, E. G., EDWARDS, N., FOWLER, K. A. & NETT, R. J. 2019. Suicides and deaths of undetermined intent among veterinary professionals from 2003 through 2014. *Journal of the American Veterinary Medical Association*, 255, 595.
- ZANIF, D., SCHMITT, C., BALZANI, C., ICHAI, C., LAVRUT, T., TICHADOU, L. & DE HARO, L. 2012. Une observation de suicide un veterinaire par pentobarbital et dexmedetomidine - A case report of a veterinary surgeon's suicide with pentobarbital and dexmedetomidine. *Annales de Toxicologie Analytique*.
- ZUZIAK, P. 1991a. Stress and burnout in the profession, Part 1: Veterinary practitioners dragged through traumatic times.[see comment]. *Journal of the American Veterinary Medical Association*, 198, 521-4.
- ZUZIAK, P. 1991b. Stress and burnout in the profession, Part 2: Veterinary practitioners confront the destructive duo. *Journal of the American Veterinary Medical Association*, 198, 753-6.

## **Chapter 9 Appendices**

### **9.1 Appendix 1: Abbreviations**

ADHD: Attention deficit hyperactivity disorder

AVS: Association of Veterinary Students

BVA: British Veterinary Association

CMHT: Community mental health team

CPD: Continuing professional development

DoS: Director of studies

EMS: Extra mural studies

GHQ-12: General Health Questionnaire-12

GP: General practitioner

HAB: Human-animal bond

NHS: National Health Service

PDP: Postgraduate Development Phase

PMR: Proportional mortality ratio

RCVS: Royal College of Veterinary Surgeons

SMR: Standardised mortality ratio

WEMWBS: Warwick Edinburgh Mental Wellbeing Scale

## 9.2 Appendix 2: The invitation to the lunchtime seminar

----- Forwarded message -----

Date: Mon, 20 Jan 2014 at 10:13

Subject: FW: Special Seminar - Friday 24 January : Veterinary Transition Study Information Seminar

To: 5<sup>th</sup> year veterinary students

Dear final years,

There will be an Information Seminar about the Veterinary Transition Study on Friday 24<sup>th</sup> January. The aim of the seminar is to give you information about a research project studying experience of transition to veterinary practice and to give you the opportunity to meet the researcher and ask questions about the study. If you chose to take part in the study and are selected for interview, up to £50 of amazon vouchers will be given to each study participant in recognition of their time.

The seminar will take place at 4pm on Friday 24<sup>th</sup> January in Lecture theatre 2.

If you have any questions at this stage please don't hesitate to contact me: [rosie.allister@ed.ac.uk](mailto:rosie.allister@ed.ac.uk) . An information sheet with FAQs about the study is attached.

Best wishes

Rosie Allister

PhD student, University of Edinburgh

Researcher: Veterinary Transition Study

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

## 9.3 Appendix 3: The information sheet

### **Veterinary Transition Study Information Sheet**

Study title: Investigating the transition from veterinary student to practising veterinary surgeon: prospective cohort study

You are being invited to take part in a research study which is being conducted at the University of Edinburgh by Rosie Allister, as part of her PhD degree.

Before you decide whether or not to participate it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and discuss it with others, if you wish. Take time to decide whether or not you would like to take part.

*Thank you for reading this.*

What is the purpose of the study?

This study explores how the transition from veterinary student to practising veterinary surgeon. The study is a cohort design, with data collection occurring during the period February 2014 - April 2015.

What are the benefits of the study?

This study aims to increase understanding of how the transition to practice influences wellbeing and mental health. A previous study looking at vet students found significant results which led to increased support being made available to students by the University. Better understanding how people are affected by the transition to practice could help new graduate vets in the future.

Will I be given anything for taking part?

If you are selected for interview and attend the interview you will be given a £20 shopping voucher in recognition of your time for the first interview. There will be a £10 and £20 voucher for participation in further interviews.

Why have I been chosen?

The study is focussing on veterinary students in the final year of their veterinary course, and as they progress into veterinary practice. All students in this year at the RDSVS are being invited to participate. The reason the study is being performed this year and not other years is because of the timing of the research project. There is no other reason why your year group has been chosen. Students selected for interview will be selected on the basis of gender, and the type of veterinary work which interests you.

What does the research involve?

Rosie Allister will attend your Friday afternoon seminar on Friday 24<sup>th</sup> January to explain the study and answer any questions you may have. After the seminar, Rosie Allister will send you an email. If you decide to take part, you can reply to the email and a consent form for the study will be posted to you which you can return in the SAE provided. If you are not able to attend the seminar but wish to take if you reply to the study invitation email, you will be sent a consent form and SAE by post.

If you are selected for interview Rosie Allister will contact you by email during January or February 2014. Interviews will take approximately 40-60 minutes and will be arranged at your convenience, in a central or Easter Bush location. The study is a cohort study, following individuals over time. If you wish to take part in the first part of the study but not follow up, that is okay. Interviews will be repeated by phone shortly after graduation, and one year later in February/March 2015.

Is the study confidential?



Your confidentiality is very important to this study. All information collected will be stored confidentially, and fully anonymised; no individual person will be identifiable in any publication. Whether or not you chose to take part in the study, and any information you provide, will have no impact on your academic progress.

Do I have to take part?

No. Participation in this research is entirely voluntary, and whether or not you choose to take part will not affect your academic progress or your legal rights.

What happens if I don't want to take part?

If you do not want to take part, you do not need to do anything. No one involved in your academic assessment will be informed which students have chosen or declined to participate.

What will happen to the results of the research study?

The findings of this research will be written up as a PhD dissertation, and may be published in journals and presented at conferences. Summary findings will be available to participants on request.

Who is funding the study?

The study is funded by an MRC doctoral training grant awarded via the University of Edinburgh to Rosie Allister and project grants from The Friends of the Dick Vet, BSAVA Petsavers, and VetsNow.

Where can I get more information from?

If you would like to know more about this study or have any other questions, please contact Rosie Allister (see below).

What do I do next?

If you decide to take part in this research, please reply to the study invitation email, which you will receive after January 24<sup>th</sup>. Consent forms will be posted to you and if you still wish to participate please complete and return these in the SAE provided.

Where do I get more information about this research from?

If you have any other questions about this research, please contact Rosie Allister by email ([rosie.allister@ed.ac.uk](mailto:rosie.allister@ed.ac.uk)) or speak to her in person at the teaching session.

Who can I contact if I need help and support?

As well as your Personal Tutor, there are a variety of other support and help organisations available:

*Samaritans* offer confidential emotional support 24 hours a day. They can be contacted on:

Phone: 08457 90 90 90 / (local rate): 0131 221 9999 / SMS: 07725 90 90 90

Email: [jo@samaritans.org](mailto:jo@samaritans.org)

Face to face: 25 Torphichen Street, Edinburgh, EH3 8HX

The *Vet Helpline* is a confidential 24 hour listening service for vets, vet nurses, vet students and their families. It offers confidential emotional support from volunteers who have knowledge and understanding of the veterinary profession. The helpline number is: 07659 811 118

The *University of Edinburgh student counselling service* can be contacted on:

Tel: 0131 650 4170

Fax: 0131 651 1359

Email: [Student.Counselling@ed.ac.uk](mailto:Student.Counselling@ed.ac.uk)

Face to face: 3<sup>rd</sup> Floor University Library, George Square, Edinburgh, EH8  
9JS

*Crisis support*

If you or another student are in immediate crisis, please call your *General Practitioner* (GP). If it is after normal working hours, contact *NHS 24*, phone: 08454 242424.

*Other help* is available at:

The Edinburgh Crisis Centre – Phone: 0808 801 0414

The Emergency Services – Phone: 999

9.4 Appendix 4: The consent form

ID Number:

Consent form

Title of Project: Investigating the transition from veterinary student to practising veterinary surgeon: prospective cohort study

Name of Researcher: Rosie Allister

	Please put your initials in these boxes.
1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without my academic progress or legal rights being affected.	
3. I agree to participate in this study by giving my contact details below to be considered for selection for interview. <div>Mobile:</div> <div>Email:</div>	
4. I am willing to be contacted in one year to take part in a follow up interview. My non-university email address is: (not an sms.ed.ac.uk address please): <div>Email:</div>	

If you wish to be considered for selection for interview please answer the four questions overleaf. This is to help with interview selection.

\_\_\_\_\_  
Name of Participant                      Date                      Signature

\_\_\_\_\_  
Researcher                      Date                      Signature

**Q1. How old are you?**

\_\_\_\_\_years

**For each of these questions please tick or type yes next to the answer which most applies to you:**

**Q2. Are you?**

Male

Female

**Q3. Do you intend to work in the UK when you first graduate?**

Yes

No

**Q4. When you first graduate what type of work would you most like to do?**

Small animal practice

Mixed practice

Equine practice

Farm practice

Zoo/exotic/wildlife/conservation

University or other specialist referral institute practice (including internships)

Other veterinary role, please  
state\_\_\_\_\_

Research, including PhD or MSc

Outside the veterinary profession, please  
state\_\_\_\_\_

Thank you for completing this form, please email the completed form to  
[rosie.allister@ed.ac.uk](mailto:rosie.allister@ed.ac.uk)